European Foundation for the Improvement of Living and Working Conditions

Impact of interfirm relationships – employment and working conditions

Impact of interfirm relationships – employment and working conditions

Authors: Kari P. Hadjivassiliou (Institute for Employment Studies, IES), Annette Cox (IES), Rose Martin (IES), Mick Marchington (European Work and Employment Research Centre, EWERC), Maura Sheehan (Brighton Business School, University of Brighton), Rosie Gloster (IES), Emma Pollard (IES), Damian Grimshaw (EWERC) and Jill Rubery (EWERC)
Research manager: Irene Mandl
Research project: The impact of emerging forms of interfirm relationships on employment and working conditions

European Foundation for the Improvement of Living and Working Conditions

Impact of interfirm relationships – employment and working conditions

Wyattville Road, Loughlinstown, Dublin 18, Ireland - Tel: (+353 1) 204 31 00 - Fax: (+353 1) 282 42 09 / 282 64 56
email: information@eurofound.europa.eu - website: www.eurofound.europa.eu

Cataloguing data can be found at the end of this publication.

Luxembourg: Publications Office of the European Union, 2011

doi: 10.2806/1337
ISBN 978-92-897-0884-5

The European Foundation for the Improvement of Living and Working Conditions (Eurofound) is an autonomous body of the European Union, created to assist in the formulation of future policy on social and work-related matters. Further information can be found on the Foundation website at www.eurofound.europa.eu

European Foundation for the Improvement of Living and Working Conditions
Wyattville Road
Loughlinstown
Dublin 18
Ireland
Telephone: (+353 1) 204 31 00
Fax: (+353 1) 282 42 09 / 282 64 56
Email: information@eurofound.europa.eu
www.eurofound.europa.eu

NORDIC ENVIRONMENTAL LABEL
541 006
Printed matter

Printed in Denmark

The paper used in this book is chlorine-free and comes from managed forests in northern Europe.
For every tree felled, at least one new tree is planted.

Foreword

Although a number of new forms of interfirm relationships have emerged over the past few decades, relatively little research seems to have been carried out to date on the impact that these have on employment practices, human resource management policies, and terms and conditions of employment for the workers concerned.

This study aims to explore these issues in greater detail. It identifies five types of interfirm relationships – joint ventures, clusters, public-private partnerships, strategic alliances/networks and virtual company networks – and seeks to examine their impact on employment and working conditions. It draws on an extensive literature review and both national-level and cross-border case studies.

The main reason for developing interfirm relationships is linked with business survival and competitiveness. Employment and working conditions are considered less important. One area most affected by the existence of interfirm relationships is training, careers and professional development.

All interfirm relationships influence the pattern of work organisation between partners. The different types of relationships appear to have varying impacts on the extent of work intensification and sense of employee well-being. Interfirm relationships have also, in some cases, led to career opportunities for employees. However, they have had limited impact on flexible work and work–life balance policies.

As the study offers a unique opportunity to identify the additional complexities arising from the transfer of practices across national contexts, it is an important source of evidence for policymakers engaged in improving human resource management practices and working conditions across the EU.

Juan Menéndez-Valdés
Director

Erika Mezger
Deputy Director

Contents

Executive summary

Introduction

This study was commissioned by the European Foundation for the Improvement of Living and Working Conditions (Eurofound) in February 2010. Its purpose was the in-depth study of the impact of five types of interfirm relationships – including joint ventures, clusters, public-private partnerships (PPPs), strategic alliances/networks and virtual company networks (VCNs) – on employment and working conditions.

The methodological approach used resulted in the production of an extensive review of literature and case studies, both national and cross-border. The unit of analysis was the interfirm relationship itself (and its implications for employment and working conditions) as exemplified by the views of respondents that are either directly involved, or affected by such relationships.

Each case study comprised a number of interviews with managers and employees based in two or more organisations involved in a particular type of interfirm relationship. In total, 20 case studies were carried out – four case studies per type of interfirm relationship – and 72 interviews were conducted.

Policy context

A number of new forms of interfirm relationships have emerged over the past few decades, each of which is characterised by a degree of boundary permeability and business integration. However, despite the proliferation of new inter-organisational forms of relationships, relatively little research seems to exist on the precise (and varied) impact of these on employment practices, human resource management (HRM) policies, and employment terms and conditions for the workers concerned.

This study was undertaken in order to explore such issues in greater depth, and crucially, to investigate various types of employment impact depending on the specific type of interfirm relationship. Indeed, this study offers a unique opportunity to identify the additional complexities arising from transfer of practices across national institutional contexts and is an important source of evidence for policymakers engaged in enhancing equity and progress in HRM practices and working conditions across the EU.

Key findings

Although the specific reasons for interfirm collaboration varied between the five types of relationships studied (as well as between case studies belonging to the same type, or even between partners within one case study), the prevalent rationale was directly linked to business survival and competitiveness, with employment and working conditions treated as second order issues.

Even so, all five types of interfirm relationships had, albeit to a different degree, an impact on specific aspects of employment. Training, careers and professional development was one area most affected by the existence of interfirm relationships. The impact on training provision was evident across all types of relationships, although its extent varied between the different forms of business collaboration. Training provision was greater where the development of specialist expertise and capability among firms was an explicit objective of the partnerships, where quality standards and regulations were imposed through supply chains, or where the sector was experiencing rapid changes in skills requirements.

All interfirm relationships influence the pattern of work organisation between partners. This influence is exerted in a number of ways but especially through joint teams working on products/services/projects, supply-chain requirements relating to production and quality assurance requirements, codes of ethics and matrix management structures, where people from different organisations are pooled for work assignments.

The different types of interfirm relationships appear to have differential impacts on the extent of work intensification and sense of employee well-being, including stress levels. Closer forms of business collaboration are more likely to lead to greater work intensification due to increased workloads for those involved. This, in part, reflects the success of certain business collaborations in generating business; the demands of setting up new relationships which were intense; and the fact that some of the work involved in all five types of interfirm relationships was project-based, involving significant effort to meet deadlines. Moreover, in interfirm relationships where one large partner dominates and is able to dictate conditions, a higher degree of work intensification was reported. The presence of interfirm relationships has also, in some cases, opened up significant career opportunities to employees through the (mostly unintended) development of labour markets between the partners.

Overall, the impact of interfirm relationships on compensation systems varied markedly and was largely indirect rather than direct. These indirect effects came mainly from both HR directors/specialists informally benchmarking with other members.

The type of interfirm relationship also had an impact on employment terms and conditions. Clusters among peer companies and virtual company networks (VCNs), which are looser forms of interfirm relationships, do not have any impact on the employee terms and working conditions in the firms concerned. In contrast, a varied degree of impact was observed in the other three types of interfirm relationships. Information and communication policies were also affected by interfirm relationships, especially as regards the level of communications which may increase as a result of such relationships.

The impact of interfirm relationships on the approach to flexible work and work–life balance policies of partner and member firms and their employees was limited. Working arrangements tended to be affected by the nature and make-up of the workforce, the sector and type of work undertaken, company size and legislation in the host country. Areas where an interfirm relationship had least impact included employee representation and collective bargaining and grievance and disciplinary procedures, which are still handled at company (and/or sectoral) level. Other aspects of HRM, including health and safety and diversity and equality issues, were influenced more significantly by the presence of statutory regulation (as opposed to the interfirm relationship).

Policy pointers

The study has highlighted a number of areas with clear policy implications. First, more support for firms involved in these relationships is needed in order to help them address the attendant HR implications. Such support, for example, could take the form of legal advice when establishing these relationships.

There is also the need to think about how EU-wide directives are translated into national law and then implemented within organisations involved in interfirm relationships, particularly cross-border collaborations.

There are also some major implications for social partners. In some relationships, there is evidence of a cross-border employee representation gap. In addition, there is also some evidence that employee representation in small and medium-sized enterprises (SMEs), including those involved in interfirm relationships, is weak particularly in sectors such as information technology, or in new Member States. This implies that social partners may wish to consider how they can help improve employee representation along supply chains and across borders rather than focusing on single companies or sectors within a specific Member State.

This study has also found that public funding has been instrumental in the setting up of some types of interfirm relationships, especially between SMEs, most notably clusters and VCNs.

There is, therefore, a need to consider policies to enable networks to become self-sustaining once funding comes to an end. Linked to this is the need to enhance awareness of learning opportunities about HRM practices and promote such learning across SMEs.

1 Background to study and methodological approach

Background

This study was commissioned by the European Foundation for the Improvement of Living and Working Conditions (Eurofound) in February 2010. Its purpose is the in-depth study of the impact of interfirm relationships – including joint ventures, clusters, public-private partnerships (PPPs), strategic alliances/networks and virtual company networks (VCNs) – on employment and working conditions.

A number of new forms of interfirm relationships have emerged over the past few decades. In the current macroeconomic climate – the aftermath of the global recession – it seems natural that they continue to be of importance, as cooperations might be a way to sustain competitiveness in a situation of limited public and private resources and insecure demand levels. Each of these forms of interfirm relationships is characterised by a degree of boundary permeability and business integration. Such evolution of business relationships has been the focus of many studies including perspectives from the competitive strategy, transaction economics, innovation theory and organisational development fields. However, despite the proliferation of new inter-organisational forms, relatively little research seems to have been carried out on the precise (and varied) impact that such forms have on employment practices, human resource management (HRM) policies, employment terms and conditions for the workers concerned.

Yet, these increasingly complex and interdependent organisational structures present particular research questions and challenges in relation to the way of conceptualising both the organisation (and its boundaries) and the resultant employment systems and relations; this study builds upon the recent empirical and theoretical contributions of Marchington et al (2005, 2009), Grimshaw et al (2002, 2006) and Rubery et al (2002). As has been observed, 'it is becoming harder to determine for whom one really works. Interlocking business relationships are at the heart of this confusion' (Felstead, 1993, p. 189). As a result, several issues were pertinent in this study.

- Whether employees are supervised by managers who are employed by another organisation.
- How pay is determined, by which organisation and for which group of workers.
- How are skills managed and whether organisations coordinate the development of careers.
- How employment relations are negotiated.
- What happens to contractual terms and conditions and security of employment under the various types of interfirm relationships.
- How issues around identity, culture and multiple forms of commitment arise for employees working in such types of relationships and in boundary spanning roles.

Previous research suggests there is mixed evidence on opportunities for skills acquisition with the direction of change dependent on sector, occupation and type of inter-organisational relationship, such as contractual or relational (see Grimshaw and Miozzo, 2009, pp. 1528–1529 for a review). Similarly, the implications for employee involvement are not clear cut, with some cases of disenfranchisement or disconnected voice arising (Marchington et al, 2005), especially where subcontractor organisations do not recognise trade unions. Indeed, in view of the fractured and fragmented nature of work organisation entailed in some of the emerging interfirm relationships, employees can be unsure about where they can make a complaint since they can find themselves working in one organisation but being technically employed by another. The difficulties for achieving a strong employee collective voice and even unionisation tend to be greater in view of the scattering of employee groups sharing similar characteristics across different work sites.

It is against this background that this study was undertaken with a view to exploring such issues in greater depth, and crucially, to investigating various types of employment impact depending on the specific type of interfirm relationship. This project offered a unique opportunity to identify the additional complexities arising from transfer of practices across national institutional contexts and is therefore an important source of evidence for policymakers engaged in enhancing equity and progress in human resource practices and working conditions across the EU.

Overview of methodological approach

The methodological approach undertaken for this study involved case studies, with a particular focus on cross-border operations across the EU. Case studies provide the opportunity to build a very detailed understanding of complex real-life interactions and processes. They allow an in-depth study of a phenomenon in a natural setting and particular context, drawing on a multitude of perspectives. They also encompass many actors and stakeholders and multiple data collection methods.

This report's case studies focused on the dynamics of interfirm relationships within their specific institutional context. This includes:

- the legal framework, including employment law;
- sectoral and spatial dimensions of competition;
- labour market conditions;
- industrial relations climate;
- business strategy;
- client relations;
- other aspects that have been shown to have an impact on employment practices deployed in various configurations of interfirm relationships (Grimshaw et al, 2006).

Such a contextualised approach to case study design (and selection) is essential since interfirm relationships, with their effects on employment and HRM, both shape and are shaped by their institutional, regulatory, sectoral and labour market environment.

The unit of analysis was the interfirm relationship itself (and its employment and working conditions implications) as exemplified by the views of the respondents who are either directly involved (for example, general manager of an SME that is part of a cluster) or affected by such relationships (for example, human resource manager and trade union or employee representative). The study aimed at eliciting the views of both management and staff working in at least two organisations involved in an interfirm relationship. As a result, the interview questions for both HR managers and employee representatives sought to obtain information in a 'before and after' context – for example how employment and working conditions were structured before the organisation entered an interfirm relationship and how, if at all, they have changed as a result of this collaboration.

However, it should be noted that while many firms reported changes since a relationship had been formed, for example work intensification, it was hard to establish whether they had been caused by the collaboration or by some other factor. Indeed, given the growing pressures on organisations in most economies during the past few years, this may have stimulated organisations to find partners with whom to share risk – as in joint ventures, for example – or to join a cluster so as to generate new orders.

Case studies undertaken

A total of 20 case studies were carried out for this study; four for each type of interfirm relationship (see Table 1). In each case study, the aim was to conduct interviews with management and staff of at least two organisations involved in a particular type of interfirm relationship. In total, 72 interviews were conducted.

Possible case studies were identified in various ways in order to cover the full spectrum of interfirm relationships. Those that have the appropriate geographical and sectoral coverage were chosen, with particular emphasis on the emergence of such relationships in the new Member States (NMS). The latter is of particular significance, not least because joint ventures and strategic alliances have been used widely in the NMS, especially between multinationals and local firms.

It should be noted, however, that the case studies were conducted over a relatively short period of time, relying on a small number of respondents from different partners across the inter-organisational relationship. While this allowed for more cases to be covered, it also reduced the depth of the study and it meant researchers were reliant on the views of key respondents. Although it was possible to use official documentation to increase the validity of the results, it was not possible to collect data from non-managerial employees at these organisations. This meant researchers had no way of knowing whether perceptions at shop-floor level mirrored those of senior HR and operations managers. It was not possible either to examine the dynamics of these networks over time to see whether experiences changed, or whether the effect on employment and working conditions was sustained. Of course, this trade-off is typical in employment relations research.

Case study selection criteria

Since the purpose of the case studies is to explore and illustrate the impact on employment and working conditions of various types of interfirm relationships, researchers tried to use a list of case study selection criteria.

- Model/type of interfirm relationships: researchers sought to develop categorisations within each type of relationship, for example, type of model of network operation and structure of clusters.
- Geographical boundary, with a greater focus on cross-border relationships.
- Old and new Member States, with a greater focus on the NMS.
- Industry/sector, aiming to include examples from a range of sectors/industries.
- Maturity of relationship, looking at the age/duration of the cooperation in terms of examining ‘young’/new vs. ‘old’/long-standing relationships.
- Institutional framework of a particular country, with an aim to include Member States that vary in terms of their compatibility according to, for example, the extent of labour market deregulation.

When selecting individual companies, researchers identified and chose the main strategic partners/companies for each interfirm relationship. Not surprisingly, these differed depending on the type of partnership. For example, for PPPs, the aim was to interview the private company (or one private company in the case of consortia) and the public body involved. For VCNs, the aim was to identify those firms central to setting up the network.

Securing access to companies

The project team experienced considerable difficulty in securing access to companies, in terms of both identifying the people to be asked for access and then getting it. Another difficulty arose from the fact that each case study required access to at least two organisations. In other words, permission to study one did not guarantee access to the other. The timing of the study, during the recent severe recession, also made it hard to convince companies to cooperate.

It proved particularly difficult to achieve access to PPPs. It was only with the help of trade union contacts in Denmark that access was secured to three PPPs there.

List of case studies

Table 1 below presents the list of 20 case studies, broken down by type of interfirm relationship, conducted in the course of this study. As can be seen from the table, some of the companies chose to remain anonymous.

Table 1: Brief description of completed case studies

Case study	Sector	Countries	Brief description
Clusters			
Medicon Valley	Life sciences	Denmark/ Sweden	Long-standing cross-border cluster in biotechnology (a typical cluster sector). The Medicon Valley is one of the leading life science clusters in the world. The Organisation for Economic Co-operation and Development (OECD) describes it as one of the most effective clusters in the EU.
PharmAgora Quality of Life Cluster	Biotechnology	Hungary	Cluster established in 2007 by 11 SMEs from the pharmacology and life science industries. The cluster has 24 members in Hungary.
NutriBiomed Cluster	Nutrition technologies	Poland	Cluster, set up in 2007, whose aim is to raise Poland's profile in the global food supplements and biopharmaceuticals market by 2015. It is supported by the EU's Innovative Economy Operational Programme for 2007–2013.
Pannon Renewable Energy Cluster	Renewable energies	Hungary	Cluster aimed at developing the renewable energy sector in the West Pannon Region through the cooperation of all the key renewable energy players. Increasingly, it undertakes cross-border projects, for example, in the Czech Republic and Austria.
Strategic alliances			
Food retail alliance between an international food retailer and local suppliers	Food retail	Poland/UK	Long-standing cross-border strategic alliances between an international food retailer from an old Member State with a number of small suppliers in one NMS. Typical example of strategic alliance in the food retail sector.
Small software house and big software company	Information and communication technologies (ICT)	UK/Europe	Strategic alliance of a small software company in the UK with a major, global software and hardware corporation (through its European operations).
Engineering alliance	Engineering	Sweden/France	Long-standing strategic alliance/subcontracting relationship between a major Swedish multinational and a small French mechanical engineering company.
MARCAR Strategic Alliance	Pharmaceuticals	EU-wide, with a focus on Belgium, UK, Austria and Germany	EU-wide strategic alliance, set up in 2006–2007, involving major pharmaceutical companies, smaller biotech start-ups, research institutes and universities. Its goal is the early detection and enhanced risk assessment of non-genotoxic carcinogens.

Case study	Sector	Countries	Brief description
Joint ventures			
Arkafund	Venture capital/ media	Belgium	Arkafund (JVA), set up in 2002 and specialising in investing in early-stage media and media-related ICT ventures, is a joint venture between Corelio, Dexia Bank and Participatiemaatschappij Vlaanderen.
Banking Joint Venture	Banking	Norway/ Germany	Relatively new cross-border joint venture in banking with a focus on the Scandinavian and Baltic markets.
European Logistics Joint Venture	Transport/ logistics	EU-wide	EU-wide network involving 11 operators who joined in a pan-European cooperative /joint venture.
IT Joint Venture	IT management and security	Bulgaria/ Romania	This is a non-equity cross-border joint venture between two information technology (IT) management and security companies. The purpose of this joint venture is to develop business in other markets, beyond national frontiers and to take advantage of local business knowledge and language skills.
PPPs			
Climate Consortium Denmark	Renewable energies/ sustainable construction	Denmark	Set up in 2008, this is a PPP between the Danish state and five major business organisations. It is the official focal point for all business activities related to renewables and energy efficiency in Denmark.
Municipality PPP	Local authority services, for example, cleaning	Denmark	This PPP involves a Danish municipality and private contractors to whom certain local services have been outsourced, for example cleaning.
Transport PPP	Transport/ infrastructure	Portugal	PPP whose overall aim is constructing a highway between Portugal and Spain. Case study focused on the provision of shadow road tolling services.
Arts Events PPP	Creative industries	Denmark	PPP where Arts Organiser (lead partner) and Arts Promoter collaborate to arrange a major Danish arts festival, ArtsFest, which highlights new Danish and Nordic outputs.
VCNs			
Supply Network Shannon (SNS)	Engineering and electronics sub-supply	Ireland	Long-standing virtual company network which operates as a regional Virtual Breeding Environment (also known as a cluster) with individual members currently creating sub-networks on a global scale.
Virtuelle Fabrik	Manufacturing	Switzerland/ Germany/	A long-standing cross-border virtual company network involving SMEs in the metal-mechanic sector in Switzerland and South Germany. Repeatedly cited as a good example of virtual enterprise networks, whose success has been replicated elsewhere, for example Virtuelle Fabrik Baden-Württemberg.
ELMEH Giu	Transport/ shipping repairs/ marine services	Sweden/Croatia	Loose confederation of companies which makes joint market appearances to increase business opportunities, bid for bigger contracts and streamline operational delivery.
PLATO Network	Business and leadership development in owner-managed SMEs	Ireland	Through a unique partnership with large 'parent' companies, PLATO Ireland Network provides SMEs with group learning, specialist expertise and advice, networking opportunities, business development training and cross-border activities.

In brief, the 20 case studies conducted have the following features:

- four per type of interfirm relationship;
- a range of sectors covered including manufacturing and services, high tech and low tech, public and private sectors;
- presence in 15 old and new Member States, plus Switzerland, Norway and Croatia;
- 11 cross-border networks, including across relatively similar (for example, Denmark and Sweden) and distinctive countries (for example, Poland and UK). Most examples are found among two types, namely strategic alliances and joint ventures.

Theoretical framework: synopsis of literature review

2

The literature review[1] forms part of a broader study of the impact of interfirm relationships on employment and working conditions. The review aims to provide an up-to-date synthesis of, and to contribute to, the relevant debates by analysing the varied effects on HRM of the five types of relationships: PPPs; joint ventures; strategic alliances; clusters; and VCNs. The review aims to go beyond previous literature, which has largely focused on workers who are segmented into different categories within organisations such as core/periphery models (Atkinson, 1984; Atkinson and Meager, 1986), or from a legal perspective on the rights of employees undergoing transfers of employment between two organisations (Hardy and Adnett, 1999). Some work has taken place on the transfer and diffusion of employment policy and practice across national borders, but the common unit of analysis here is the multinational (often US-owned) company, where the transfer of practice takes place between corporate headquarters and subsidiary divisions (Almond and Ferner, 2006). The more complicated evolution of changes in different elements of HRM policy, practice and process as a result of multilateral relationships between organisations has received relatively less attention.

This has led to assumptions that employment relations (and to some extent employment contracts), which have traditionally referred to a single employer–employee relationship, can be analysed using the historical frame of the single organisation, even when they concern interfirm relationships (Rubery et al, 2003). Yet, there is an increasing body of empirical evidence that management practices, including employment policies, are influenced and even shaped by clients, suppliers and partners, in examples of manufacturing supply chains and PPPs (Marchington et al, 2005; Fisher et al, 2008).

This review lays out definitions of the main types of interfirm relationships; gives a brief overview of the theoretical literature on interfirm collaboration; considers the social and institutional contexts in which such relationships operate; and summarises the existing evidence on the impacts of the different forms of interfirm collaboration on HRM.

Common types of interfirm relationships

The various types of interfirm relationships tend to have different objectives and involve various degrees of cooperation, both in terms of the breadth and depth of their relationship. Therefore, some definitions are given here that can be used to explore the different types of collaboration under study – PPPs, joint ventures, strategic alliances, clusters and VCNs. It should be noted, however, that the boundaries of the definitions of these categories are not strict.

Public-private partnership (PPP)

Lattemann et al (2009) draw on the literature to identify six fundamental attributes of PPPs, which can help to distinguish these partnerships from the broader process of privatisation. These are that the collaboration is voluntary and based on contracts; it is among public and private partners; it fulfils certain tasks of public interest; it is often performed in an entrepreneurial manner; the opportunities and risks are shared among the partners; and the partners expect encouragement to achieve their own goals and to gain in various ways from economic synergies.

Financial backing may theoretically be anything from 100% private sector funding to 100% public sector funding. However, 100% private sector funding should not occur: if private backers are willing

[1] This is an abridged version of the literature review, which is available at http://www.eurofound.europa.eu/publications/htmlfiles/ef110122.htm.

to take on the full risk, then there is no market failure and therefore no need for a PPP (Lattemann et al, 2009).

PPPs may be set up with a number of objectives in mind. For the public sector partner, partnership with a private sector partner may offer new opportunities for greater flexibility of employment practices and work organisation, as well as offering service users more choice and better value for money (OPSR, 2002). PPPs may also be established to draw on private sector expertise (whether in management or in IT, for example) and to break monopolies – initiating competition and (particularly in the case of communications) network effects (Lattemann et al, 2009). For the private sector partner, PPPs offer an important new arena for growing markets with a relatively stable and reliable client base, while also sharing risk. PPPs have been scrutinised for their failure to establish a basis for market competition and improved efficiencies. Problems identified by UK studies include the imbalance of expertise between public and private sector partners in contract design, the limited evidence of innovations in work organisation and job design and the failure to establish a strong, trusting, 'relational contracting' approach to PPPs (Grimshaw and Roper, 2007).

Joint venture

Although there is more than one type of joint venture, the focus here is on equity-based alliances, in which the partners create a separate legal organisational entity representing the partial holdings of two or more parent firms. The ventures themselves tend to be subject to the control of their parent firms (Schuler et al, 2004) and the arrangement is normally long-term (Koeszegi, 2004).

Joint ventures are established for a number of reasons. Partners may wish to expand into a new geographical area or specialism while sharing risks with, and learning from, other firms. The joint venture may even be launched as the first step towards acquisition of another firm. Conversely, the joint venture may be a move towards divestment of an area of business. The venture may also represent an opportunity to cut costs by locating the venture in a less expensive nation (Allen & Overy, 2009).

Strategic alliance or network

A strategic alliance is a formal relationship between two or more parties, usually within a supply chain (Maloni and Benton, 1997), to pursue a set of agreed goals or to meet a critical business need while remaining independent – retaining flexibility, a light legal burden and the ability to end the relationship fairly easily (Johnson et al, 1996). Partners may provide the strategic alliance with resources such as products, distribution channels, manufacturing capability, project funding, capital equipment, knowledge, expertise or intellectual property.

Todeva and Knoke (2005) identify a number of reasons for forming strategic alliances: economic (market-seeking, cost-sharing, reducing risk, benefiting from economies of scale); strategic (cooperating with potential rivals, pre-empting competitors, gaining access to new skills, knowledge and technology); and political (overcoming legal and regulatory barriers).

Cluster

Clusters can be defined as geographically proximate groups of independent but interconnected companies, suppliers, service providers and associated institutions in a particular field, having some things in common, and/or complementing each other. Clusters are often concentrated in a particular national region, and sometimes in a single town, but increasingly 'clusters of clusters' are emerging across regional and even national borders. They may be collaborating or competing; and they may be institutionalised (with a cluster manager) or non-institutionalised (European Commission, 2002).

There may be many reasons for forming a cluster, but they will centre on growth and long-term business benefits. There has been considerable interest, driven in part by the Lisbon Agenda, in promoting clusters, or ‘innovation poles’, at EU level – especially to bring together high-technology organisations, universities, business and financial intermediaries (European Commission, 2005). Clusters are formed to:

- enhance innovation and competitiveness through sharing of skills and information;
- gain information;
- access a qualified labour force;
- access nearby universities, training centres and research institutes;
- take advantage of local features like customers and suppliers (European Commission, 2002).

These benefits may be particularly valuable for SMEs, which are less likely to be able to make economies of scale and may be unable to take advantage of market opportunities requiring a rapid and large-scale response (UNIDO, 2001).

Virtual company network (VCN)

A VCN is a temporary alliance of enterprises that come together to share skills or core competencies and resources in order to execute a specific contract (that is, project-based work), or better to respond to business opportunities. Cooperation between firms is characterised by a widely dispersed network of actors and a high degree of reliance on and use of ICT and computer networks. In other words, cooperation by separate organisations across geographical boundaries is mainly virtual (Donker and Posthuma de Boer, 2001) – usually temporary, and often with intensive use of ICT (Brandão Moniz and Kovács, 2000).

Such networks may be created to fulfil a particular order or requirement, especially where markets are turbulent and opportunities pass quickly. Firms in the network hope to aggregate competencies and resources, reduce costs and increase market share (Brandão Moniz and Kovács, 2000).

Table 2: Overview of the main characteristics of different types of interfirm relationships

	Partners	Objective	Characteristics of cooperation
Public-private partnership (PPP)	Public and private organisations	To fulfil certain tasks of public interest	Joint fulfilment of tasks (often on an ongoing basis) based on contracts
Joint venture	Generally private businesses	Long-term orientation such as the entering of new geographic markets, outsourcing or the acquisition of another firm	Establishment of a separate legal entity jointly owned and controlled by the partners
Strategic alliance/ network	Private businesses, often along the supply chain and of different size	Improved supply-chain management while sustaining (legal) independence of the individual firms	Joint fulfilment of tasks (often on an ongoing basis) based on contracts
Cluster	Private businesses and other local actors (for example, universities), often in a geographically limited region and rather smaller organisations	To jointly achieve the advantages of larger organisations (for example, access to expertise or financial resources)	Sometimes formal (based on contracts), sometimes informal (based on trust)
Virtual company network (VCN)	Private businesses, also from geographically dispersed regions	To join forces to better respond to business opportunities	Temporary cooperation based on interaction via modern ICT, often project related

Summary

The analysed types of interfirm relationships can be briefly summarised according to their main characteristics, as shown in Table 2.

Interfirm dynamics

Economic exchange is often embedded in social relationships such as those involved in interfirm collaborations. This can make social interactions critical to the functioning of such relationships and markets (Granovetter, 1985; Uzzi, 1996). For example, relationally embedded network ties (that is, ties that arise from interfirm relationships between companies belonging to networks), themselves embedded within these social relationships, have been shown to influence the firms' decision-making and behaviours. This dynamic may be particularly important for interfirm relationships such as strategic alliances that emerge and develop in business settings where the logics of embeddedness are particularly salient. Some of the key broader themes in interfirm relationships are risk, trust and power.

Trust, modularity and risk

The issue of trust has attracted a great deal of attention in the literature on interfirm relationships. Such relationships often aim to enhance participating firms' knowledge and skills – which may pose a threat to competitive advantage when firms operating within the same markets collaborate (Pucik, 1988). This makes trust crucial to productive relationships. Trust is also important even when there is no overlap between firms' markets – for instance in a supply-chain relationship – since many other risks exist, such as low-quality outputs or non-renewal of contracts. Partners thus need to be able to trust each other and may act to minimise these risks.

There is a need for some caution in how theories of trust are applied to interfirm relationships. In particular, it is not clear to what extent one can generalise trust beyond individuals to the company level. It may be problematic to anthropomorphise organisations, although authors do sometimes assume firms are 'actors' (Möllering et al, 2004). However, this problem can be addressed by focusing on key individuals within organisations, looking at the trust between key strategic managers, between employees and managers, and among junior employees.

Sako's (1992) analysis provides a useful spectrum which can be used to analyse levels of trust in different types of interfirm relationships. Although Sako focuses on buyer–supplier relationships, her typology could potentially be applied more widely. She envisages a spectrum of interfirm relations, from Arm's-length Contractual Relation (ACR) – a less 'close' market-based relationship – to Obligational Contractual Relation (OCR) – where there is mutual dependence. OCR, compared to ACR, is characterised by higher levels of trust. This higher level of trust underpins a variety of behaviours in OCR relationships:

- greater transactional dependence on trading partners;
- a longer projected length of trading (see also Parkhe, 1993);
- less contractualism;
- more informal knowledge-sharing;
- sourcing only from one supplier;
- more sharing of risk;
- more trust in partners' competence (Sako, 1992).

Recent discussions of 'modularity' (referring to the degree of interaction between firms in a network) in interfirm relationships (again, especially client–supplier relations) have added to this picture of trust between managers and illuminated its effects on HRM. Highly modular relationships, as might be seen in firms down the supply chain, where layers of subcontracting are apparent, involve few interactions between firms, weak interdependence and formalised or codified exchanges (Sturgeon, 2002). This tends to be associated with low levels of employment security, low wages, strongly hierarchical relationships and few opportunities for career development. By contrast, weakly modular relationships typify high-trust networks where partners often work together on a number of projects, and links between organisations occur at multiple levels. In this situation, working conditions are likely to be taken more seriously because clients are keen not to damage their own reputations by providing defective goods or services. Efforts are often made across the network to improve the quality of HRM, to provide training to meet quality standards and to encourage employee discretion (Marchington et al, 2009).

Trust among employees is also important. In an interfirm context, employees may not identify strongly with their colleagues – they may not identify strongly with the organisation they are working for. However, Lee (2004) found in a study of a US–Korean joint venture that trust and organisational identification can together determine continuous improvement (employees striving for quality). Trust between employees can also be improved in an international context through training – for instance, Johnson et al (1996) found that training in cultural sensitivity can foster trust between workers in an interfirm context.

Different types of interfirm relationships may involve varying degrees of risk for the organisations involved. However, all relationships are likely to involve some uncertainty and therefore some degree of risk – and these risks may be seen to increase as time, information and control decrease (Ring and Van de Ven, 1992). Ring and Van de Ven hypothesise that varying levels of risk and trust will have an impact on governance structures.

- Deals that involve low levels of risk and low levels of trust are likely to involve market-based relationships – for example, discrete contracts.
- Low-risk and high-trust relationships are likely to involve recurrent contracting, with little performance monitoring or attempts to control the relationship.
- High-risk and low-trust relationships are likely to be hierarchical, providing parties with safeguards against adverse outcomes.
- High-risk and high-trust relationships are likely to involve a relational contract requiring commitments from all those involved, including safeguards. Provision may be made to ensure that knowledge-sharing is fair.

Factors outside the interfirm relationship can also contribute to the level of trust in an interfirm relationship. For instance, Lane and Bachmann (1997) found that system power, in the form of strong and predictable institutions, can foster trust.

Power, dominance, control

Mechanisms to monitor and control partner organisations are closely related to risk and trust: firms may wish to minimise risks (such as the risk of low-quality products or services) by initiating monitoring. This may take a number of forms. Partner firms may encourage self-monitoring in their associates – a fairly loose and trusting arrangement. Alternatively, there may be monitoring of partners' processes, or of their outputs, which will tend to be stricter (Aulakh et al, 1996).

Firms' capacity to exert such demands on partners depends largely on the type of relationship. The clearest opportunity for firms to exert control over partners occurs when collaborating partners hold a dominant position over others within the same network – for instance, suppliers may be pushed to cooperate with buyers (Marchington et al, 2009). Relationships between clients and suppliers can involve varying degrees of influence. Four potential client–supplier models have been identified by Sinclair and colleagues (1996, cited in Garavan et al, 2008, p. 622). These range from a 'demands' model, where a client will have specific requirements and request delivery within a defined contract period, to a 'partnership' model, under which client and supplier work together on a range of issues including training, development and management. Client–supplier relations can have a particularly strong impact on the supplier if lead organisations take unpredictable actions such as cancelling contracts or dramatically reducing orders (Marchington et al, 2009).

There are also more benign forms of dominance relationships – for example, through the dissemination of good practice from firms with well-resourced HR departments or training provision to others in the network (Marchington et al, 2009).

The hierarchy does not need to be explicit for issues of dominance and control to emerge. Firms that wish to maintain their competitive advantage may attempt to control partnerships to ensure this. Kabst (2004) cites the example of the Siemens-Fujitsu joint venture, which encountered difficulties and over-commitment of resources due to a wish by both parties to control the venture through staffing of senior posts. Parent firms may also wish to retain their own HRM practices simply because they are familiar with them (Iles and Yolles, 2002).

Alignment, integration and consistency

The closeness of organisations' HR practices may be captured by the concepts of integration, alignment and consistency (Marchington et al, 2011).

Alignment refers to the creation of links between organisational goals or strategies and HRM, which then leads to the development of employee commitment and allegiance to organisational goals.

Integration refers to HR packages or 'bundles' – connected or complementary policies, which usually aim to enhance organisational cooperation and effectiveness. This refers both to the policy level and to actual behaviour and practices in an organisation.

Consistency refers to employees' perception of fairness, over time and in comparison with colleagues. Formal or informal engagement with multiple employers can lead to lack of consistency. Marchington et al (2011) give the example of an employee who might have an appraisal or performance review from a network partner, but who may not be able to access recommended training due to their own employer's decision. Lack of equity in pay and disciplinary matters may also occur (Cascio and Serapio, 1991).

HRM in the organisational relationship

Table 3 summarises the different HR policies that can be found in the five types of interfirm relationships under examination.

Table 3: HR Policies by type of interfirm relationship

	PPP	Joint venture	Strategic alliance/ network	Cluster	Virtual company network
Staffing and recruitment	Contracts very often involve staff transfer from public to private sector partner; change in terms and conditions contingent upon employment protection regulations (for example, Acquired Rights Directive) and role of trade unions and works councils (for example, Berlinwasser; Mülheimer Entsorgungs-gesellschaft, cited in European Commission, 2004).	Sources for staffing can include: parent companies, locals, third-country nationals, and others (Harry and Banai, cited in Schuler and Tarique, 2005). Expatriate staffing from parents can be a problematic manifestation of a struggle for control (Kabst, 2004). There may also be staffing implications for parent companies; for example, a need to replace staff who are recruited in the joint venture.	As no new entity is formed, there may be less potential for impact in this area (and in HR in general), compared with independent joint ventures (IJVs) (Schuler and Jackson, 2004).	Unlikely to be greatly affected, but may help identify skills locally (European Commission, 2002) – although this may result in poaching between companies.	Unlikely to be greatly affected, but links may facilitate recruitment. This may be positive or negative for individual companies – poaching may occur.
Training and development	Major challenge for developing a shared approach to training, given the different organisational objectives of profit motive vs. public service (Grimshaw et al, 2011).	Knowledge sharing and transfer can be a key driver for the establishment of IJVs (Schuler and Tarique, 2005). Cross-cultural training and development initiatives can be important (Schuler et al, 2004).	The alliance may be formed to meet particular skills needs. Demand for scientists and engineers, for example, is likely to increase and make these skills more valuable (Schuler et al, 2004). Cross-cultural training and development initiatives can be important (Schuler et al, 2004).	Sharing of knowledge may be a key reason for establishing the cluster, though arrangements for training might not be formalised. There may also be concerns about knowledge-sharing with, or training of, competitors.	Knowledge-sharing and development is a major objective of the VCN (Brandão Moniz and Kovács, 2000): impact expected for knowledge workers.
Pay systems and structures	Pay may be affected by staff transfer to a private firm – as found in UK studies reviewed by Grimshaw and Roper (2007). Lower-paid workers may be negatively affected while white-collar workers may benefit, in terms of both pay and employment conditions (Keune et al, 2008).	This tends to be locally adaptable (Schuler and Tarique, 2005, p. 12) but the parents may have some influence. Multiple compensation systems can cause feelings of inequality (Cascio and Serapio, 1991).	Corporate social responsibility (CSR) of a strategic partner may have an impact.	Geographical proximity may mean that reward systems are similar, though this may not be a matter of policy and it is likely to depend on whether partners are at the same level of the value chain. Partners' CSR may have an impact.	Little impact expected.
Management and supervision	Performance monitoring and accountability may increase or change in character – for example, targets-focused (Hall, 2008).	Given that the venture involves risk to the parent companies, there may be monitoring and control pressures (see Aulakh et al, 1996).	Less impact expected compared to joint ventures, as no new entity is formed, but clients may place performance monitoring or supervisory pressures on suppliers.	Dependent on type. Cooperative clusters unlikely to experience effects; suppliers may experience performance monitoring or occasional supervision.	Little impact expected.

	PPP	Joint venture	Strategic alliance/ network	Cluster	Virtual company network
Work organisation and working time	Work intensification can occur, especially for public sector employees moving into private sector management. Public sector employees might be confronted with managerialist and quasi-market attitudes and values such as greater focus on cost-efficiency and target-based performance management of employees (Hebson et al, 2003).	Joint ventures may be located to take advantage of favourable (less strict) labour market regulations.	CSR of a strategic partner may have a moderate impact.	Those in supply chains may be affected by client demands (Sako, 1992), perhaps due to CSR – although this effect may be mitigated by EU regulations.	Relationship is set up to respond rapidly to market needs, so the network may lead to intensification of work, even if not as a result of pressure from partners.
Staff health and safety; Well-being	Public Sector Directive 2004/18 and the Utilities Directive 2004/17 allow public authorities to use a range of conditions in procurement, including social and environmental (Hall, 2008).	Ethical standards may need to follow parent countries' influence (Schuler and Tarique, 2005 – though they are speculative on this rather than providing empirical evidence – p. 12), where the joint venture is established in a less regulated country – for example, to fulfil CSR.	CSR of a strategic partner may have an impact.	CSR may be important for suppliers (for example, OECD, 2002).	Little impact expected.
Employee representation and collective bargaining	Collective representation of public sector employees through unions may be fragmented (Hall, 2008), but unions may also benefit from new pockets of unionism in private sector firms.	Evidence from multinational corporations (which have some comparability to IJVs in terms of cross-border parental control) is mixed. Some (especially US) parent companies resist unionisation, but unions have been successful in certain campaigns for influence (Grimshaw et al, 2011). Managers may choose to sign protocols (for example, recent agreement by Delta Airlines, KLM and Air France[2]). Parent and venture location may be important.	Unlikely to have a strong impact.	CSR may come into play (for example, if suppliers impose conditions about access to collective bargaining), but this has not been a focal point for campaigners.	Little impact expected.
Trust	Some suggestions that PPPs may erode employee-employer trust and lead to higher levels of organisation-level monitoring (Hebson et al, 2003).	Complexity of the joint venture may make the establishment of trust within the venture a slower process (Schuler and Tarique, 2005).	Monitoring mechanisms may be important for trust between buyers and suppliers. Sako's (1992) analysis of British and Japanese interfirm relationships and an examination by Aulakh et al (1996) conclude that establishing more subtle forms of control is associated with higher levels of trust compared with direct monitoring of outcomes and results.	Relationships between partner companies may be significant in a supply chain (see Sako, 1992). Also crucial for knowledge-sharing between competitors (see for example, Johnson et al, 1996, on cooperative relationships).	The relationship depends on trust, but interfirm trust may be difficult to establish, especially where short-term orders are being processed rapidly.

2 http://avstop.com/news_june_2010/airline_ceo_s_and_union_leaders_sign_historic_joint_venture_protocol.htm

Social and institutional context

A variety of characteristics that can be clustered by nation will have an effect on HRM policies and practice. These include institutional influences – the impacts of policy and regulation – as well as more diffuse socioeconomic and cultural conditions.

Institutional influences

Labour market regulations such as legal minimum wages, contractual protection and working time vary across the EU (Grimshaw et al, 2011), which will have an impact on collaboration across national boundaries.

Industrial relations systems matter in a variety of ways. HRM within and between firms is also clearly influenced by worker rights and collective bargaining arrangements in various national contexts. The various systems of labour organisation across Europe (European Commission, 2008) can have differing impacts on human resources in interfirm relationships in particular. For instance, models of IT outsourcing with staff transfer take the form of direct staff transfer in the UK but a transition to a joint venture in Germany, largely as a result of stronger participation of works councils in designing the transfer process (Grimshaw and Miozzo, 2009). Conversely, interfirm relationships can affect wider patterns of collective bargaining. For example, collective bargaining may become more fragmented where there are unclear organisational boundaries, weakening industrial relations systems which are strong when employer units are clearer and more permanent (for studies of such an effect in Germany and in France, see Doellgast et al, 2009; Doellgast and Greer, 2007).

Other policy choices may also have a major effect on specific types of interfirm relationships. For instance, it is no coincidence then that the UK seems to have the lion's share of PPPs in Europe given its weak commitment to public sector capital investment. Specifically, from 2001 to the end of 2008, the total value of signed PPP contracts in the UK was €61.1 billion, while the total value of signed PPP contracts for the rest of Europe was €36.6 billion (IFSL Research, 2009, Table 5, p. 3). While PPPs have, in recent years, become increasingly popular in a growing number of European countries, they are of macroeconomic and systemic significance only in the UK, Portugal and Spain. In all other European countries, the importance of investment through PPPs remains small in comparison to traditional public procurement of investment projects (Blanc-Brude et al, 2007).

Socioeconomic influences

A number of socioeconomic factors will come into play to influence employees' bargaining power and shape work environments.

- Labour market conditions will affect recruitment, job security and the availability of temporary labour (Grimshaw et al, 2011).
- Education and training and associated career progression – companies will need to take into account the skills profile of their partners' nations (Grimshaw et al, 2011).
- Social factors such as social stratification, standards of living and the welfare state are likely to affect employee perceptions of fairness in pay structures. Collective agreements can provide marriage or child allowances, or require that funding is offered for children's education. Wages may also be expected to rise in line with cost of living (rather than in line, for example, with personal performance) (Grimshaw et al, 2011).
- Household-level systems – household, family and gender norms potentially affect expectations about working time, family and equal opportunities (Grimshaw et al, 2011).

- National variations in production systems and work organisation can lead to different expectations. Various nations have tended to have particular firm and network structures. For instance, German manufacturing has traditionally demonstrated a high degree of vertical integration – firms have tended to maintain internal control over all stages of production, from the design stage to delivery and marketing of the end product. Interfirm networks have typically been used more in the event of spare capacity than as a general system of supply or cooperation. By contrast, Italian manufacturing has traditionally involved cooperative networks (for a review, see Sturgeon, 2002).
- Normative or cultural influences may also have an impact on managerial cultures and approaches to business, and it has been suggested that such cultures can be a vital factor in the success or survival of interfirm relationships (see Fedor and Werther, 1996, cited in Iles and Yolles, 2002; Danis, 2003; Kyj and Kyj, 2009).
- Stage of development of emerging markets can be an important contributor to how firms interact with each other, and learn from each other in all respects. For example, it has been suggested that firms in more mature emerging markets seek different types of learning and use different learning processes, compared to those in more recently opened post-socialist economies (Hitt et al, 2005).

Conclusion and hypothesis for case study approach

This review has highlighted some of the key concepts which affect HRM in interfirm relationships, and has formed hypotheses regarding the probable HRM impact of five types of collaboration.

- This examination of the literature suggests that the degree of trust and risk in interfirm relationships will affect the HRM approach, with higher levels of trust and lower levels of risk allowing for longer-term, less formalised relationships. Lower levels of trust and higher risk, however, tend to result in more ‘modular’ relationships that are more likely to be based on discrete market transactions.
- Differing levels of power will also affect the interfirm relationship. Firms that are dominant, due to their size or their position in the supply chain (that is, as a client with the power to terminate or reduce contracts), may have a disproportionate impact on smaller organisations’ HRM policies. This may take the form of explicit/direct requests for changes to HRM (such as skills development/qualifications or of ‘softer’/implicit influences such as diffusion of good practice).
- Alignment, integration and consistency will also vary according to how closely organisations work together, and according to whether the objectives of the collaboration require changes to working practices.

Synthesis of case study findings 3

This chapter presents the main findings of the 20 cases studies. The first section contains a description of the five types of interfirm relationships in terms of their specific configuration, rationale, intensity/strength of collaboration and levels of trust between partners. There is also an examination of how the work is divided and organised between various collaborating companies, including the extent of cross-boundary working. In the second section, there is a detailed look at the impact of interfirm relationships on specific aspects of employment and working conditions. A summary of the sectoral and geographical coverage, and a brief summary of each case study has already been presented in Table 1 in Chapter 1.

Structural characteristics of the analysed interfirm relationships

Virtual company networks (VCNs)

The VCNs studied are loose networks of companies, which are mostly SMEs. Some have joined forces in order to:

- use a wider pool of labour/skills/capabilities;
- bid for bigger contracts/projects, thus securing better prices;
- enter new markets, and/or develop joint projects/products that would be difficult for member companies to achieve by themselves.

For example, the idea behind Virtuelle Fabrik, a virtual manufacturing network among Swiss and German companies, is to offer a spectrum of electrical, electronic or mechanical solutions to customers (in a sense acting as a larger firm). One of its most recent successes in joint product development has been the city dustbin (see www.abfallhai.ch, for more information on this product, the 'litter shark') which is now widely used in cities all over Switzerland. Similarly, the SNS network, a long-standing virtual engineering and electronics sub-supply network in Ireland's Shannon region in the west of the country, has developed a joint quotation model. Overall, VCNs serve as a resource pool from which partnerships can be formed to fulfil a specific customer request, or take advantage of a market opportunity. Indeed, the use of the partners' core competencies for securing joint orders is often one of the networks' key aims.

Most VCNs also carry out joint promotional and marketing activities, thus providing participating companies with a robust marketing platform to raise their profile both at national and international levels. For example, in October 2010, SNS organised a major exhibition in the city of Limerick to showcase its work and its member companies. Similarly, the Virtuelle Fabrik regularly participates in an important sectoral exhibition which again helps raise its profile and that of its members. The PLATO network, an Irish-based VCN aimed at promoting business and leadership development among SMEs in a particular region, also organises showcase events to allow small businesses in the region to increase their profile.

Another activity undertaken by some VCNs is the organisation of training events and seminars in order to enhance the management skills and business capabilities of their members. For example, the Virtuelle Fabrik runs its own training programme for its brokers. Similarly, the PLATO network brings together organisations in one region, with larger companies assuming the role of 'mentors' for the smaller ones. Having regular meetings between the members of the network (either using video conference facilities, for example Virtuelle Fabrik, or face-to-face, for example SNS, PLATO) are also integral to the operation of these networks. For example, in PLATO, SMEs belonging to its local groups meet monthly to share their experiences and concerns about business development and strategy.

Some networks also join forces to develop and promote the combined capabilities of their members in a particular region, so as to make it attractive for foreign investment. For example, the initial vision for SNS was to develop and promote sub-supply capability in the Shannon region, thereby reinforcing the region as a world-class source of engineering and electronics sub-supply products and services.

Significantly, funding from both European and national/regional sources has been instrumental in the setting up of a number of VCNs, including. Virtuelle Fabrik, SNS and PLATO. The way they operate is quite informal and non-prescriptive. That said, all involve a quasi-structure with a network coordinator and a number of committees/working groups manned by volunteers from their members. For example, SNS is driven by an independent steering committee and a number of sub-committees (for example, research and development (R&D), marketing, environmental) whose officers are drawn from member companies and two development agencies, Shannon Development and Enterprise Ireland. The PLATO network, currently consisting of about 1,000 SMEs, has set up seven regional networks across Ireland, each with several local groups. The VCN coordinator is also instrumental in generating a strong sense of commitment among partners, leading to better business-related outcomes for the entire network.

The amount of joint/cross-boundary working in VCNs varies. For example, one of the main areas of impact of the Virtuelle Fabrik network is on the way work is organised, since the development of joint products involves the deployment of joint teams. Employees from different companies that take part in these joint teams assume different roles in projects depending on their specific skills and expertise. By contrast, the amount of joint working is more limited in other VCNs, for example SNS and PLATO. As these are more business-to-business networks, the only joint working occurs when managers of the different companies meet. That said, companies belonging to SNS do come together – in the areas of engineering, sub-assembly and logistics – and submit a joint quote to a client.

The level of trust between members belonging to VCNs varies. However, it tends to be high, especially in long-standing networks involving organisations with complementary skills (for example, Virtuelle Fabrik, SNS and PLATO). Moreover, the strong regional dimension of some means that their members know each other and have a high degree of personal contact between them, which in turn is conducive to a higher level of trust.

Some VCNs share and spread good practice, including in HR-related issues. For example, PLATO members have discussed the impact of the minimum wage on their employment practices; and they have had the opportunity to learn from others (usually larger companies) in the network with more HR expertise. Similarly, in the SNS one company's well-being programme had been promoted throughout the network as an example of best practice.

Interfirm contractual arrangements are quite loose in VCNs, in that all companies operate quite independently and autonomously and 'join forces' only if there is a specific (project-based) need.

Clusters

The drive to increase the competitiveness of a company or region is one of main reasons behind forming clusters. Companies join the Pannon Renewable Energy Cluster because it allows them to:

- pool their resources;
- bid for bigger contracts (as opposed to tendering individually);
- take advantage of joint marketing activities to raise the profile of their respective companies.

Similarly, in the PharmAgora Biotech Cluster the companies (mainly SMEs) involved had three main incentives to work together. They could:

- cover a larger part of the pharmaceutical and health market;
- offer more complex services;
- create a common platform in order to strengthen the market position of the member companies.

Apart from improving access to markets and strengthening their own market position, another key reason for organisations participating in clusters (for example, Medicon Valley, Pannon Renewable Energy, NutriBiomed) is their desire to access an increased pool of specialist expertise and to take advantage of, and contribute to, skills formation (typically at regional and/or cross-border levels). The Medicon Valley life sciences cluster, for example, is in a region with 45,000 life sciences students and 9,000 life sciences graduates every year. Companies involved want the cluster to grow in order to attract the best scientific talent from around the world. They also want to know about any research developments in the cluster, so that they can take advantage of them and also benefit from any spill-over effects.

Also crucially for the formation of clusters is the active support, including funding, of key government actors such as regional development agencies. To this end, clusters, in particular those in Eastern Europe, seem to have also benefited from the availability of EU Structural Funds (channelled through various intermediaries).

In a similar way to the VCNs, clusters are associated with a support structure that is more formalised than in the case of networks. Specifically, in most cases, there is a cluster organisation that oversees and coordinates the work of the cluster as a whole, promotes its profile and organises joint events and seminars on issues that are relevant to cluster members. For example, the Medicon Valley Alliance (MVA) is the Danish-Swedish cluster organisation that represents the region’s life sciences actors. It is a non-profit member organisation with a remit to carry out initiatives on behalf of the life science community, so as to generate new research and business opportunities within the region. Crucially, these initiatives are of a type and nature which members would not be able to implement individually, and which further strengthen the development of the cluster. They include joint marketing and promotional activities, building local and global networking platforms for cluster members, developing networking and training events and seminars. The Pannon Renewable Energy Association, the PharmAgora management organisation and the Wroclawski Park Technologiczny (NutriBiomed) are the cluster organisations for these respective clusters and they undertake similar tasks.

The strength, intensity and focus of interfirm collaboration depend on the sector within which a cluster operates, the size of the firms involved and the extent to which the skills and expertise offered by the members are complementary. For example, in the Medicon Valley cluster, the major pharmaceutical company does not tend to get involved in joint projects, since it has both the capacity and the expertise to undertake such projects on its own. The main advantage of the cluster to that company is access to an increasing pool of scientists employed in that region. On the other hand, for the smaller companies, cluster membership can generate new business development opportunities. However, even for the large number of small biotech start-ups that belong to this cluster, closer interfirm collaboration may be difficult because of the very competitive nature of the pharmaceutical sector and the attendant intellectual property rights.

Not surprisingly, although trust within the cluster varies, in general trust levels among members are rather low. Indeed, this cluster appears to involve a loose association of companies that share information and act together on certain issues, for example education requirements for scientists and training seminars for cluster members. It might be the very competitive nature of the commercial exploitation of life sciences that makes it difficult for companies to work in a more integrated way.

In contrast, in the Pannon Renewable Energy cluster, which brought together organisations working on all the commercial aspects of renewable energies and as a result have complementary skills and expertise, the extent and intensity of interfirm relationships, as exemplified in joint projects and integrated teams, is considerable. Cluster-based relationships are mainly among project managers, managing directors and cluster managers. These relationships are good and have been instrumental in seeking government funding, opening international doors and promoting learning between cluster members. As a result, the level of trust among cluster members is high.

Similarly, the organisations in the PharmAgora cluster tend to develop joint projects, since they are all at different stages of the value chain of food science and drug development. As such, there are no direct competitors in the cluster, since the products and services they offer complement each other. In this cluster, members, most of which are SMEs, work together on a project by project basis, with joint teams being formed in order to deliver contracts. Despite the fact that cluster members work together, relationships and levels of trust between them vary, depending on length and experience of previous collaboration. The more long-standing members of the cluster had worked together for a decade before the cluster was formed and therefore have a good understanding of the other organisations and a high degree of trust.

Pooling of human (and other) resources allowed some of the interfirm partner organisations to improve their efficiency and undertake projects and bids that would be difficult or impossible for individual firms to carry out alone. For example, as mentioned above, the Pannon renewable energy cluster joint projects, combining employees' skills and expertise, allowed for bigger projects to be taken on. Crucially, interfirm relationships can affect managerial attitudes and practices through the sharing of information, even in looser forms of business collaboration such as clusters.

As illustrated by the case studies, cluster members were involved in discussions over a variety of common issues, including HR, which could, in turn, lead to informal benchmarking and comparisons with other organisations, sharing of good practice and keeping up-to-date with legislation. The interfirm collaborations allow firms – often in the same sector – to discuss how they retain skilled staff, for instance.

In most cases, there are no formal contracting arrangements between the cluster organisation and cluster members. In certain cases, for example, PharmAgora and Medicon Valley, members pay a fee to the cluster organisation, which covers the coordination costs.

Joint ventures

In the joint ventures studied, the organisations joined forces to:

- improve their competitive position;
- access new markets;
- combine complementary skills to develop more integrated products and services;
- access partners' HR (skills, capabilities) in order to take advantage of a 'shared labour pool'.

For example, one Scandinavian retail bank sought to set up a joint venture (Banking Joint Venture) to expand its retail and corporate banking and insurance products into the Baltic States. At the same time, the German partner had already bought some retail banks in the Baltics and was looking for a partner to expand this operation. Crucially, a major factor in deciding to opt for a joint venture was the desire to share risks.

In the case of the European logistics joint venture, which uses an integrated IT system and a uniform quality standard to coordinate a number of logistics and technical installation companies across Europe, its purpose is to improve their competitive position by providing an EU-wide logistics and installation network. This was achieved by offering international clients a pan-European logistics service with streamlined quality assurance and management systems. This, in turn, created an attractively simple and integrated service for clients who do not wish to deal with several different firms in different Member States.

Similarly, the IT Joint Venture was set up with the intention of developing business in other markets, taking advantage of local business knowledge and language skills. The venture is seen by the Romanian parent company as an interim step towards developing an independent company in Bulgaria.

Accessing specialist expertise has also been cited as one of the main reasons for setting up joint ventures. For example, the Arkafund joint venture combines venture capital and media sector expertise. In this case, Partner 1 got involved because the other partners had expertise in a market segment (media and media-related technology) that was of particular interest to that company as it lacked the relevant knowledge.

In general, it seems that parent companies directly interlink more or less only in the design/set-up of the (later independent) joint venture, while they subsequently have a loose cooperation, managed by the joint venture. Each joint venture studied is a legally independent entity. However, there are variations in the extent and strength of interfirm relationships, especially those involving the parent companies and the venture itself. For example, in the European Logistics joint venture, the joint venture company itself provides only management and financial support to the parent companies, which divide work between them as appropriate. The Arkafund joint venture is also completely independent from its parent companies in terms of operations, corporate governance and HR policies. However, like the previous example, it employs a rather limited number of employees and relies on its parent companies/shareholders to develop joint services in terms of investment decisions. This structure, combined with the fact that the venture seeks to deploy flexible and integrated teams from the different partners, means that, despite legal and operational independence, the interfirm relationship between the venture and its parent companies is quite strong. For example, some staff from one parent company work part time for the venture, helping it with business development and management expertise.

The Banking Joint Venture also operates quite independently. It is managed by a group management function based in Denmark and employs about 50 staff. The partners were involved in the recruitment of employees to head the groups in the joint venture, including finance, HR and legal affairs. There are regular meetings between the parent companies and the group management. The joint venture placed some managers in local areas (particularly in areas characterised by high credit risk) and had responsibility for drawing up their HR practices and policies independently. However, the guiding principles of work organisation – how to behave when trading; who the organisation would do business with; how employees and customers could expect to be treated – are all based on the code of ethics of the Norwegian (dominant) partner, which were suitably adjusted for the venture. The latter's employees are managed under a matrix structure whereby a manager may have responsibility for staff in different countries. This has, in turn, given rise to personnel issues relating to cultural differences. Specifically, employees from different cultural backgrounds have different expectations about, for example, the number of hours they work. The European Logistics joint venture coordinates the work of several companies in the field of logistics and technical installation and, as such, involves delivery assignments in different countries. Overall, work organisation has not been significantly affected, but there has been some joint working by cross-national teams. Here, workers remain employees of the parent companies but are overseen by the joint venture company – which subcontracts the parent companies. In this case, the overall organisation of the work is determined by the joint venture head office. There are quality assurance procedures and the parent companies have requirements about supervision on the job.

The fourth joint venture studied, the IT Joint Venture, is a non-equity joint venture between two IT management and security companies: one Romanian and one Bulgarian, each of which operate quite independently. The key aim of the venture was to expand in a new market across the border by tapping into the skills and knowledge of local staff. Such local knowledge was highly valued. Indeed, it was seen as beneficial to the Romanian parent company that the manager of the joint venture operations was a Bulgarian local, who would be able to operate successfully in a market that can be challenging for outsiders to crack. The Romanian parent company has also dispatched two employees from Romania to Bulgaria to work for the joint venture, and staff will be rotated so that others get experience of this. Overall, the movement of employees between the parent companies and the joint venture itself is primarily for training and knowledge transfer purposes. The partners divide work among themselves at annual meetings – assessing different employees' skills. Transfer arrangements can be undertaken if these are needed.

Joint ventures, as well as other forms of interfirm relationships, can also promote the transfer of good practice across a number of areas, including HR. Partners may encourage each other to commit to better management practices, such as quality assurance processes, or formal assurance of ethical approach to employees. This may occur through mutual agreement – perhaps in order to make an improved offer to clients. For example, the European Logistics joint venture benefited from the fact that quality assurance was formalised in order to appeal to clients who were looking for a reliable pan-European distribution service. This type of improvement has been facilitated by the interfirm relationship, although it is clear that customer/market requirements have driven the need for such quality assurance. In the Banking Joint Venture, the Code of Ethics of the dominant (larger) partner influenced the way employees were treated in the new entity.

Strategic alliances

The main rationale behind strategic alliances is business related in terms of:

- entering new markets (for example, the UK/Polish alliance);
- developing new business opportunities and/or new products/services (such as the MARCAR alliance);
- enhancing competitiveness in domestic and/or global markets (MARCAR alliance, IT alliance).

Interestingly, several companies are using an alliance to expand their reach without committing themselves to expensive internal expansion beyond their core business, such as the Engineering alliance and the UK/Polish food retail alliance. The Big Partner wanted to enter the Engineering alliance to focus more on its core business by outsourcing an operation that was becoming less important to its overall business strategy.

For smaller companies, notwithstanding the unequal distribution of power, such alliances allow them to join forces with major players in a particular sector (such as the IT alliance, MARCAR alliance and Engineering alliance), and as such:

- strengthen their own market position (IT alliance, MARCAR alliance);
- protect that position as a result of being, to some degree, exclusively a business partner of a major player (IT alliance);
- ensure a certain volume of business (Engineering alliance);
- learning, sharing and exchanging knowledge, technology and best practice with the partner (UK/Polish food retail alliance).

In the IT alliance, Little Partner saw this interfirm relationship as a way to grow its business. To this end, it approached Big Partner for opportunities to gain accreditation to sell and implement its software products and solutions to other companies.

The strategic alliances studied as part of this project involve different configurations of interfirm relationships. Two of them (UK/Polish food retail alliance, Engineering alliance) represent a comparatively close form of such relationships, akin to long-standing and formalised supply chains with a dominant client company on which the other partners are highly dependent. In contrast to this, the IT based alliance analysed involves a much looser relationship between the partners, although a supply-chain relationship with a dominant company can also be found here. However, there is no formalised legal structure among the involved organisations, and the cooperation is also comparatively new. An even less tight relationship between partners has been found in the MARCAR alliance, aiming at realising joint projects (within which strict division of work is practised) while the member companies act as competitors beyond these joint orders.

Strategic alliances, especially those akin to supply-chain relationships, have a more direct impact in the way work is organised, especially in the smaller/dependent parties. For example, in the Engineering alliance, in a typical supply chain manner, when Big Partner places an order with Little Partner, the former specifies everything that relates to the production of that particular product and closely monitors progress of the order. Similarly, the impact of the IT strategic alliance on work organisation issues has also been significant. Owing to the strategic links between Little and Big Partner, it seems that the choice of tasks has increased for employees at Little Partner: the range of work undertaken has broadened and employees have more scope to put themselves forward for a varied range of projects. The UK/Polish food retail alliance has also had a major impact on work organisation, since the realisation of joint projects involves the deployment of joint teams from different partners. Employees working in joint projects are managed under a matrix structure, in that they are being managed by their line manager, but technically they are working for a project manager based in a different partner organisation.

Working with larger partners or those in a dominant position can also create particular challenges for firms. For instance, the supply relationships in two of the strategic alliance case studies had led to some pressure for the smaller partners, who were forced to comply with client demands. The clients, meanwhile, were largely unaffected by the relationship.

However, it is worth noting that such pressures can also result in diffusion of good employment practices in smaller firms. Corporate social responsibility policies of a client firm, for instance, can require that suppliers have human resource policies that guarantee employees' working conditions. This may occur not only through direct influence from the client firm, but also through selection of partners that already have good policies in place – thus contributing to a market in which human resource practices that benefit employees give firms a competitive advantage. This was indeed the case in the UK/Polish food retail alliance.

Moreover, interfirm relationships, such as strategic alliances, may involve cooperation or close working with competitors in a similar field. This can, in turn, create tensions when sharing information, although some informants felt that moving beyond a competitive environment can in fact encourage innovation and allow for breakthroughs (as in the MARCAR alliance). Staff retention may occasionally be an issue when cooperating with competitors, as poaching of highly skilled staff can occur – although the benefits of collaboration were generally, in this study, seen to outweigh such risks.

PPPs

Outsourcing linked to cost considerations combined with a policy push towards greater private sector involvement in the provision of public services lies behind the rationale for some PPPs studied as part of this project (such as Danish Municipality PPP, Climate Consortium Denmark PPP, Arts-related PPP, Transport PPP). Notably, the Danish municipality also saw its involvement in the PPP as one way of creating distinctive career opportunities for its employees who can work in these private companies under transfer arrangements.

The Transport PPP exemplifies such forms of interfirm relationships encountered in infrastructure projects. It involves a private sector consortium (concessionaire) which has a contract with the Portuguese government (grantor) to build and operate a highway to improve safety levels and travel times between Portugal and Spain. The way work is organised between companies is highly project-dependent, in that employees can be working locally, long-distance and from abroad. During installation of, for example, road toll equipment, employees work in teams together with the client.

The extent and strength of interfirm relationships in this PPP is exemplified in the use of cross-organisational and cross-border teams, which adds value to the project, but also poses a challenge for the partners involved. Indeed, inter-organisational relationships with a cross-border dimension were seen as particularly challenging in understanding the partner's position because of different mentalities and cultures, which creates challenges for experts who are required to work closely in teams with colleagues from different countries.

The Municipality PPP involves the outsourcing of services (such as cleaning) to private contractors thought capable of providing the local council with such services in a cost-effective way. This PPP, which began a few years ago, has involved integrated teams of staff from both parties. Danish law ensures that the rights of municipality employees under transfer are protected (in line with the EU Acquired Rights Directive). The private contractor has a designated person who is responsible for managing the PPP-related client interface. Under this person, the work is assigned to different line or project managers. These persons are responsible for communicating with, and managing the integrated teams of, municipality employees and private contractor staff. Typically, contractual arrangements between the parties are formalised in written agreements that determine in great detail how tasks are allocated and responsibility is shared between partners. As a result of the long duration and positive experience of this interfirm relationship, the level of trust between the parties is high.

The third PPP studied is not very typical in that it concerns a partnership between a partly state-funded arts organiser (Arts Organiser) and an arts industry body (Arts Promoter) in Denmark. These organisations work together to run a major, largely state-sponsored, arts festival, ArtsFest, which provides a platform for Danish and North European artists.

The collaboration requires a great deal of joint working and some employees, dedicated to ArtsFest, are shared on an occasional basis. Despite such arrangements, the relationship between the partners can be quite ad hoc – for instance, employees are transferred only when requirements are urgent, and this is not done on a permanent basis. Interestingly, in this PPP the recruitment process is important in terms of selecting employees who are able to successfully handle this type of interfirm cooperation.

Climate Consortium Denmark, the fourth PPP, established in June 2008, is also untypical. It is a PPP consisting of:

- the Ministry of Economic and Business Affairs;
- the Confederation of Danish Industries;
- the Danish Energy Association (private body);
- the Danish Construction Association (private body);
- the Danish Wind Industry Association;
- the Danish Agricultural Council.

The aim of this consortium is to increase awareness of Danish businesses' climate-friendly products, technologies and competences. The associations involved, treated as private bodies, are used as providers of expertise in their respective sectors in the PPP. As a result, most cross-boundary work takes place at senior level, for example at CEO or CFO level, in working groups, networks and board meetings. However, cross-boundary working at other levels is expected to expand in the future.

Impact on employment and working conditions

The impact of the various types of interfirm relationships on aspects of employment and working conditions are presented below. These include:

- terms and conditions of the employment contract;
- professional and career development, including workers' mobility and labour market opportunities;
- the compensation systems;
- employee well-being, including aspects of work intensification;
- communication and information policies;
- performance management and supervision;
- flexible working arrangements and working hours;
- equality and workforce diversity;
- health and safety at work;
- grievance and disciplinary procedures;
- employee representation and collective bargaining;
- interfirm alignment of HR strategies and practices.

Employment contract and terms and conditions

The terms and conditions of the employment contract is one area where the specific nature of the interfirm relationship appears to have an employment-related impact.

In clusters and VCNs, interfirm collaborations do not have any impact on terms and working conditions in the firms concerned. As the case studies highlighted, clusters of companies at the same level of the value chain and VCNs are somewhat loose forms of business collaboration, whereby even in the case of joint projects each company tends to operate independently. Although in certain cases, employees are transferred or seconded in other partner locations, such as the Pannon Renewable Energy cluster, their terms and conditions remain the same as in their parent organisation. This is because their initial employment contract is not transferred to the partner organisation.

However, it should be noted that in some cases, such as the NutriBiomed cluster, where the interfirm relationship does not currently have any impact on terms and conditions, this is expected to change. Specifically, it is expected that the cluster is likely to develop integrated policies and procedures in the future that could have an effect on the employment relationship.

By contrast, the other three types of interfirm relationships have an impact, albeit varied, on employment terms and conditions. In three of the four strategic alliance case studies, the interfirm relationship has had some impact on terms and conditions, although this impact is less direct than initially thought and mainly relates to staffing levels and ensuing employment security.

For example, the UK/Polish food sector alliance is likely to have a direct impact on staffing at Little Partner 2 in the near future. Specifically, when Big Partner releases a new product line or service, or opens a new store, Little Partner 2, which is a highly innovative marketing ‘start-up’company, fulfils the demands of this additional workload by using their contract workers. This is not always efficient in relation to time or money, given the tight labour market. Thus, Little Partner 2 is considering employing some contract workers on a permanent basis, primarily to meet the demand generated from Big Partner. It is likely that the direct effect of this alliance will be to transfer five jobs from a contract to permanent status within Little Partner 2.

The new joint team between Big Partner and Little Partner 2, initiated by some of Big Partner’s clients/suppliers has also provided a stimulus to this likely increase in the number of permanent employees. Crucially, both Little Partners indicated that their alliance with Big Partner reduces their risk and exposure to the rapidly changing economic environment, which both felt increases the stability of employment levels.

A similar picture emerges as far as the IT alliance is concerned. Although there has been no direct effect at all on the terms and conditions of employment for staff at Big Partner or any transfer or secondment of staff between companies, there has been some impact on Little Partner’s staffing methods. The latter seeks to expand through building up a bigger portfolio of expertise in Big Partner’s software. When Big Partner releases a new product, there is usually a delay in building staff expertise in this area and during that period Little Partner usually employs contractors who have already gained this expertise. This leads to fluctuations and peaks and troughs in the proportions of contractors employed. The relationship with Big Partner has led to a significant expansion in the numbers of staff employed. Since 2007, when the relationship started to become highly successful, employee numbers have doubled from 40 to 80.

Similarly, the MARCAR strategic alliance, although not directly affecting the employee terms and conditions, has had a positive impact on business development and employment levels of partners by providing scope for EU-wide interfirm collaborations. Likewise, the long-standing relationship between partners in the Engineering alliance has provided Little Partner with a degree of economic security and stability in terms of set volumes of production as well as the opportunity to reach new markets and expand its business. This has allowed it to increase its staff from about 30 to about 100 during the past decade.

In the case of joint ventures, the impact is varied and, in most cases, not extensive. In two of the case studies, Arkafund and European Logistics, the interfirm relationship did not have any impact on terms and conditions. In the other two, the impact involved new obligations for job mobility. For example, in the IT Joint Venture employees of the Romanian parent company who work for the joint venture have to be willing to move to Bulgaria, and this is written into their terms and conditions. That said, employees were already obliged to work in clients' offices, either in Romania or abroad. Moreover, employment is not very stable due to the nature of the IT industry. The exploratory nature of the joint venture makes it even more difficult to guarantee employment security.

In the Banking Joint Venture, the terms and conditions of employment contracts vary within the joint venture because the market conditions of the countries in which it operates are different. Interestingly, it was pointed out that if the joint venture offered terms and conditions substantially over and above the local market rates, it would be priced out of the markets in which it operates; for example, Denmark, Germany and the Baltic countries, where there are different pension arrangements.

Of the four PPPs, the ones that have had a distinct impact on terms and conditions are those that represent more typical forms of this type of interfirm relationship – that is, infrastructure (Transport PPP) and public services (Municipality PPP) – as opposed to others that are less typical (for example, Climate Consortium PPP).

In particular, the Transport PPP has had a clear impact on the employees' terms and conditions. For example, the need by the private contractor under the PPP contract to provide services 24/7 for service and maintenance of equipment has resulted in the adaptation of the employment contracts – for example, as far as working hours/shifts are concerned. In another company involved in this PPP, although the contract had not resulted in any change in the mixture of staff employed on different types of contract, it did lead to an increase in the overall number of both permanent and temporary employees.

In the case of the Municipality PPP in Denmark, a number of council employees are transferred to other partner locations in a process managed by the line manager in accordance with specific provisions. This ensures that the new terms and conditions are not very different from those they enjoy as Municipality employees. As far as employment security is concerned, this cannot be guaranteed to all employees, but only for the ones who have been working for a long time. Most of the Municipality's staff have employment contracts that are not open-ended. The private company does not guarantee employment security (but is looking into this aspect at present). It employs a mix of permanent and temporary staff.

In the Arts-related PPP, although the interfirm relationship has had no observable impact on formal terms and conditions, in practice the working environment is affected by ArtsFest. Moreover, employment protection of employees is made possible because employees tend not to be transferred to a different employer (such as Arts Promoter) on a long-term basis, and everyone who is employed directly by Arts Organiser is on an employment contract for at least four years.

Overall, respondents in PPPs argued that inter-organisational collaboration had not impacted substantially on employment and working conditions, except for feelings of increased stress and work intensification among the private sector partners and some amendment to terms and conditions of employment. This was a slightly unexpected finding when compared with results derived from research in the UK, as noted above. One reason is likely to be the distinctive country context; three of the four case studies were in Denmark where unions are stronger and there is a smaller difference in intersectoral conditions in general. Another reason relates to the nature of some of these partnerships; for example, two of the four were concerned with climate change and funding for the arts rather than the contracting out of large swathes of services from the public sector to major multinational contractors – a focus of research in the UK.

Impact of interfirm relationships on terms and conditions of employment

- Some impact: *Strategic alliances; Joint ventures; PPPs*
- No impact: *Clusters; VCNs*

Career and professional development

Interfirm relationships appear to have some of their strongest impact in terms of the type and volume of training provided to staff. This was evident across all types of relationships, though not all types of relationships experienced the same level of impact across all cases. The extent of impact is moderated by size, sector and geographical proximity of organisations.

For some organisations, partnerships have also opened up significant career opportunities to employees through the (mostly unintended) development of labour markets between the partners or at regional level. These take the form of temporary secondments between organisations, pull factors such as higher wages and better career opportunities that make it attractive for workers to move to larger partners, as well as deliberate poaching of high-performing individuals by the stronger partner. Internal labour market structures in terms of organisational hierarchies appear to remain untouched by collaboration between organisations, as do the criteria for promotion and entry to career development schemes within organisations.

Training and career development opportunities

Within strategic alliance relationships, there have been a number of significant impacts on training, mostly within the smaller organisations involved. Overall, the increases in type and volume of training are stimulated by two distinct rationales: a direct mandate from the larger, usually more powerful partner, and indirect information exchange alerting firms to the possibilities for and benefits of additional training provision.

Direct requirements for increased training imposed by larger firms are evident with respect to specific types of training. In particular, there has been an increase in health and safety training undertaken by some of the smaller partners in the MARCAR alliance, the Engineering alliance and the UK/Polish food retailing alliance. In the Engineering manufacturing alliance, this is driven by the larger company's particular motivations to comply with standards of good supply-chain practice and regulation. In other relationships, such as the large MARCAR cluster, larger firms have gathered information about new technologies from their partners, which inspired them to increase training provision to take advantage of the new opportunities.

There are variations in the extent to which the experience of working with larger firms has improved training systems, as well as increasing training volumes in smaller partners through subsidy. One of the smaller firms in the Polish food retailing cluster has adopted a more professional approach to identifying skills gaps and is developing a training strategy as a result of increasing its training provision due to the relationship with its larger UK partner. The IT software house has improved its provision of information on training courses to staff and adopted the competency framework of its larger partner. Crucially here, the larger partner also subsidises some of the smaller firm's training to ensure its staff are competent in installing its systems out of enlightened self-interest. In the Engineering alliance, where the larger partner imposed a direct requirement for training, the smaller partner was expected to cover the additional costs. The difference is explained by the nature of the relationship between the two organisations. In the Engineering alliance, the Swedish company simply requires the French partner to supply components for their end product. In the IT software partnership, the smaller partner makes an active contribution to selling and marketing the larger partner's services; therefore, the larger partner stands to increase its revenue directly by supporting the smaller company in doing this.

The presence of large numbers of small organisations coupled with less immediate and close contact within VCNs has led to provision of training that allows the networks to function effectively by focusing on enabling the companies to work together – for example, through the use of ICT and the network's intranet in the Virtuelle Fabrik case. Such training is targeted at a mixture of senior and junior staff. On occasions, training is inspired by informal learning and feedback gained from partners through them commenting on each other's sales techniques and business plans in the Plato case study, while a joint sales training package was developed for Virtuelle Fabrik members. In the Supply Chain Shannon network, collaborating in training provision was originally one of the primary activities of the network but this has diminished due to increasing firm-specificity in training requirements which means that generic training is less appealing, combined with the removal of funding subsidies for training that is required by law.

Within clusters, training provision was often high and extensive, partly due to the technology-intensive, high-skilled nature of the work in the renewable energy and biopharma sectors from which the case study companies were drawn. In keeping with the normal custom of the sector, training did not necessarily involve attendance at formal courses, but might involve observation or attendance at seminars run by the cluster or by local universities which were often active partners in the foundation of clusters, such as Medicon Valley and Pannon Renewable Energy. The level of impact on training varies by cluster and appears to be related to the motivation and objectives for the cluster's creation. Thus, a main goal of the Pannon Renewable Energy cluster was member development, in contrast to the PharmAgora cluster, which was more focused on its function of marketing members' services. In the NutriBiomed cluster, staff were often very highly skilled specialists and training provision was limited to English language training rather than technical skills that were developed on the job. Well-established patterns of higher skilled staff receiving more training than lower skilled groups appeared in some cases; for example, provision of training to enhance career development for laboratory technicians in Medicon Valley was of concern to employee representatives. One organisation in the Pannon Renewable Energy cluster found that collaboration led to training programmes, in the form of external seminars and workshops, as well as internal training on project management for staff to enable the company to provide services required by cluster members.

The PPP relationships have not necessarily led to increased training. Sectoral context and the nature of the PPP appear to be important in determining training provision. Any additional training provided is due to enabling staff to work together in their joint activities rather than increasing depth of employee skills levels for their existing roles. No training is provided jointly by partners. Thus, at the Transport PPP both partners give staff project-specific training involving training in cross-cultural awareness at Company B. The Climate Change Consortium and Arts-related PPP provided relatively limited training, consisting of a one-month induction and supplementary language training when needed for the former. Employees in the Arts-related PPP received limited on-the-job training because training needs were not significant; commitment to the arts and personal qualities rather than technical skills were valued and the organisation said investment was inhibited by a lack of government funding for young organisations in the creative sector. The Municipality PPP stipulates training requirements in contractual terms of the legal relationship but neither partner appears to believe it has affected training provision directly. The learning gained by employees appears to come from the on-the-job experience for public sector staff working in a private sector organisation.

Training in joint ventures incorporates a mix of formal programmes combined with learning gained through staff transfers. Within the logistics joint venture, mutual learning opportunities have been informal and achieved through visits and informal exchanges of staff to develop technical knowledge in order to collaborate. Within the Arkafund joint venture, the joint venture itself has benefited from the expertise of skilled staff from the parent organisations who work within it and act as mentors. Training at both the Arkafund and the Banking Joint Ventures has been provided to help employees understand the implications of the legal structure of the organisation. At the Banking Joint Venture management training covering risk and talent management has recently been given because of a potential takeover, but in both cases the training provided is determined without parental influence. The IT Joint Venture is founded on the goal of knowledge-sharing which the Romanian parent company believes is essential to the technology industry. As a result, many training courses are provided, including those teaching soft skills such as customer service. The company has supported its Bulgarian partner in developing its internal training programmes. Employees say they have not yet seen the effects of this.

Overall, all forms of interfirm relationships involved, albeit to varying degrees, enhancing employees' skills. This could occur on a fairly informal basis – through discussions at meetings, or simply by working with colleagues from other organisations. In other cases, there were more structured training programmes.

Impact of interfirm relationships on training and development

- Major impact: *Strategic alliances*
- Some impact: *Clusters; Joint ventures; PPPs; VCNs*

Workers' mobility and labour market opportunities

Labour market opportunities within the organisations in strategic alliances appear mostly dependent on the size and scale of the relationships involved. For two-partner relationships, as in the case of the Polish food retailing alliance and the UK software house, career opportunities developed via an informal labour market through which staff were recruited primarily from the small firms by the large firms, fostered by geographical proximity and dominance of the larger partner within the sector and labour market. In the case of the food retail alliance, which involves a snack food company, marketing company and a major food retailer, joint project working has led to some permanent movement of staff between the companies involved. However, this led to tension, and staff exchanges from the smaller partners to the big partner were then undertaken with caution.

Within the larger network of MARCAR, graduates and post-doctoral researchers who completed projects found job opportunities in project partners across Europe. In the Engineering alliance, there was no labour market between the two organisations, which is likely to be largely due to the geographical distance between them. Reactions within the smaller organisations to their staff moving to larger partners were mostly relaxed. The small companies in the food retailing partnership were the exception to this, and although a secondment system between the organisations has been proposed, the two smaller organisations were concerned about the impact on staff retention. This may partly reflect the tight labour market for key staff groups such as graduates in Poland. There may be mixed effects of labour market opportunities for staff. Benefits include skills development to improve employability while risks are associated with relocation, such as the need to adapt to a new country or organisational cultures. It seems that these risks acted more as deterrents for some applicants, rather than as negative impacts on those who had taken up new posts.

For the VCNs, factors other than network membership generally had greater influence on career development and labour market mobility. In the Shannon network, there was some evidence of a labour market for managers and a concerted effort among network members to provide jobs for workers made redundant by other network members as a result of recession. In the Virtuelle Fabrik and Plato networks career mobility was limited, due partly to the different products/services offered by members. As for the Virtuelle Fabrik network, there has traditionally been limited labour market mobility between Germany and Switzerland and a prevailing dislike of poaching within the business culture.

Within the clusters, evidence of career development opportunities through labour markets among partners was mixed and markedly influenced by the reasons for the formation of the cluster. Within Pannon Renewable Energy, there was a potential, but not active, labour market for project managers. In Medicon Valley, rather than an explicit agreement to source labour from among partner organisations, a labour market emerged from the concentrated presence of multiple large talent pools with global labour market reach for some of the science professionals. This fluid labour market is also fostered by different taxation regimes in Sweden and Denmark and good transport links, making commuting from Sweden to Denmark both feasible and financially attractive. The relatively advanced state of labour mobility in this cluster also reflects the cluster's goal of building a large and concentrated pool of highly skilled scientists. At PharmAgora, the focus of the cluster on collaborating to bid for funding, combined with its relatively short history, presence of firms with entirely different products and services and focus on SME membership, has meant that no labour market, as yet, has developed between members.

Among the PPP relationships, the reason for their creation was the dominant explanation for the extent of labour market development. The Arts-related and Transport PPPs had not developed any labour market between partner organisations, although Company B which provided technical services for the Transport PPP's road building programme sometimes moved staff onsite temporarily. The partners involved in the Arts-related PPP had similar career structures, possibly due to sectoral similarities within the music/events industry, but no exchange of workers. The Climate Change Consortium was relatively new and focused on developing the provision of services for members, so no joint/shared labour market had yet emerged. In contrast, interviewees from the public partner in the Municipality PPP claimed that its primary goal was to offer career opportunities to its workers. They explained that by showing their capabilities while working with the private contractor they could gain promotion within the council more quickly.

There is no clear pattern of labour market development within the joint ventures because this is dependent upon their nature and the maturity of the relationship, combined with the existence of an international labour market for the occupations involved. In this type of relationship, there is more evidence of informal exchanges of secondments between organisations. Thus, Arkafund has created opportunities to work in the joint venture for its partners on a secondment basis with terms and conditions of the original employer applying to those who are transferred. At the banking joint venture, internships are possible from the joint venture to the parent companies. Arkafund has also acted as a source of information on recruits for the small media companies, with the joint venture funds filling the informal role of a recruitment broker. However, there is no evidence of labour market mobility between employees from the two parent companies. At the banking joint venture there are opportunities to work abroad within the joint venture. In the IT joint venture, a shared labour market may be a future possibility as the relationship expands and matures and one or two staff from the Romanian parent company are already based in a partner organisation in Bulgaria. In the logistic joint venture, no cross-company labour market has been created because of the geographical distances between the partners.

Overall, business collaborations and the various forms of networks are often used by employees to explore the pool of potential employers. Employees' increased awareness and knowledge of alternative employment opportunities can encourage firms to compete in improving pay and working conditions in order to attract staff (as is the case of the Medicon Valley cluster).

Moreover, employees often saw international work, perhaps as a result of transfers to foreign partners, as personally enriching (as in the case of the European Logistics joint venture). The new opportunities offered by such work can lead to improved chances for promotion for some employees (as found in the Romanian-Bulgarian ICT joint venture).

Impact of interfirm relationships on worker mobility and labour market opportunities

- Some impact: *Strategic alliances; Joint ventures; PPPs; Clusters*
- No impact: *VCNs*

Compensation systems

Overall, the impact of interfirm relationships on compensation systems varied markedly and was a largely indirect influence on management and employees. This differs from the results of some research into supply-chain relationships which has shown individual organisations dictating or advising their collaborators on wages, or how to pay them. This study, in contrast, suggests that managers were keen to protect their autonomy in choosing pay systems and the way in which bonuses were determined, and would resist any direct attempts to influence these elements, although, generally, no such attempts had yet been experienced.

Within strategic alliances, the effects of interfirm relationships on compensation systems appear to be influenced by the state of the labour market and possibly the industrial sector. Thus, for MARCAR and the Engineering alliance there was very limited impact, and at the small French firm in the latter alliance, the management understandably used closer comparators from other small firms in their local area. However, for Polish food retailing firms and the Software House in the UK, pay and benefits had to be competitive to recruit staff and the smaller companies in the relationship had improved their pay and benefits packages as a result. This was due to the buoyant labour market for graduates in Poland, coupled with their expectations of high salaries from multinational corporations (MNCs), and the tight labour market for IT specialists with expertise in Big Partner's software. In both these cases, the attractions of better pay and conditions still stimulated some movement of staff between the organisations, usually from the smaller to the larger companies.

For joint ventures, there are mixed effects of the relationships on pay practices. In the IT Joint Venture the companies negotiated common pay scales for the joint venture and at the Banking Joint Venture a ceiling was put on maximum individual payments. It is possible that the strong effects on strategic alliances and on the IT Joint Venture case are because of the tight IT labour markets. For other organisations, there seems to be no link between pay impact and whether the companies in the joint venture are complementary or operate in the same part of the sector. In some cases, pay levels are influenced by national contexts, as in the case of the Banking Joint Venture. Pay may also act as an influence on other elements of the partnership. For example, the pricing strategy in the EU logistics joint venture was affected by different wage levels in the partnership.

For clusters, the greatest influences on pay were found in the Medicon Valley cluster in Denmark/ Sweden. This suggests that sectoral and regional characteristics affect wages in these cluster companies. However, this influence may go both ways with the presence of the cluster influencing the region and sector. Other clusters consisted of businesses that were cooperating purely for commercial reasons rather than to create a skilled labour pool, and so here, wage comparison and alignment was less important. In order to compensate for the reduced job security of working in a 'start-up' environment, small firms were paying higher salaries and offering better benefits than larger firms. Similarity of firms within a cluster seems to have more of an effect on pay than the similarity of the sectors. For example, in the biomed/life science clusters in Denmark/Sweden, there was greater mutual influence on pay levels than in the Pannon Renewable Energy Cluster and PharmAgora in Hungary where the existing pay practices were broadly similar. There may be country-specific effects to Hungary but these remain unobserved within the research design adopted.

Within PPPs, the effects on pay are generally limited with the Climate Change, Municipality and Arts-related PPPs reporting no effects as all pay systems were within the control of each individual organisation. Organisations in the Climate Change Consortium reported that they used similar organisations in their sector as benchmarks for pay, rather than members of the consortium. The Arts-related PPP reported that pay levels in the arts sector were low and pay was not a significant motivator for people who chose to work in the sector, making comparisons less important. In the Transport PPP consortium, impact appeared to vary between partners in the same consortium. The local country wage rates affected how pay scales were applied in Company B whereas for Company A, the policies of the national headquarters in Norway dominated pay decisions. This reflects that the nature of the organisational relationships in some of the PPPs appears to be less close than in some other PPPs which have been studied.

Among VCNs, differences in pay levels exist because the members are not necessarily located within a small geographical area and the organisations span a business sector. Thus, while there is some benefit associated with the possibility of benchmarking pay practices and a common approach to dealing with the impact of minimum wage regulation in the Irish cases of Plato and SNS, there is no evidence that this has actually affected pay rates. In the SNS case, tensions have arisen between workers collaborating on joint projects due to different pay systems, but there is no evidence that any action was taken by managers to adjust pay rates in response. In the Virtuelle Fabrik case, there is less pressure to smooth out any disparities in wage levels between companies because of a tendency not to discuss pay in Swiss business culture. The ELMEH Giu case in Sweden/Croatia experienced a strong impact from the Japanese parent company on pay practices.

The overall effects of interfirm relationships appear to be strongest where a relationship with a larger organisation raises the pay level in a smaller partner, and where particular groups of staff have strong individual bargaining power, such as graduates or IT professionals. Powerful clients may also seek to shape pay practices to ensure the right calibre of staff are recruited. Country effects are difficult to discern within the sample of organisations achieved in the research design. In other relationships, there is limited evidence of some informal benchmarking as well as evidence of specific cultural or country effects through the control of pay by MNC parent companies. Compared to the evidence from the literature review on the impact of joint ventures and strategic alliances on pay, there is less evidence of tensions between workers due to a disparity in pay rates. This may be because workers don't know what their peers earn, but some joint ventures in this research had few staff, which may limit any impact, especially when employees are working abroad.

Impact of interfirm relationships on compensation

- Major impact: *Strategic alliances*
- Some impact: *Joint ventures*
- No impact: *Clusters; VCNs; PPPs*

Employee well-being

The different types of interfirm relationships appear to have different impacts on work intensification and sense of employee well-being, including stress levels. It appears that closer forms of business collaboration such as strategic alliances, PPPs and joint ventures are more likely to lead to greater work intensification, particularly for employees in the dependent partners.

The reasons for this range from the need to meet strict production and/or project deadlines, different ways of work organisation (such as lean manufacturing), downward cost pressures combined with increased workloads (for example, in certain PPPs to ensure that contracts are retained/renewed), the transaction costs of cross-boundary and cross-border working. With regard to the latter, cross-organisational working can increase the complexity in the way people work, thus contributing to higher levels of stress. Several case studies showed that workers experienced stress when faced with the difficulty of prioritising projects and/or orders coming in from all directions. Pressurised environments were also created by high workloads combined with the managerial challenges of working across organisational boundaries.

Employees involved in the MARCAR alliance have experienced greater work intensification as a result of the alliance. They are expected to meet pressing project deadlines and to apply and constantly update their specialist skills in several projects, each of which involves partners with their own organisational cultures. Each company must also compete hard within the alliance in order to meet other partners' needs. Employees are asked to become more effective in balancing their workload, especially as additional work brought in by the MARCAR alliance has to be accommodated alongside their other work (unless the MARCAR-related work is so large that they are fully assigned to it).

Similarly, the Polish food sector alliance has also led to greater work intensification and employee stress. Some of this is caused in Little Partner 2 by the long working weeks that occur when Big Partner is about to launch a new product or service, or open a new store. Indeed, this is a key reason why several of the contract workers are likely to be given permanent status soon (see above). For Little Partner 1, communication difficulties with Big Partner can result in having to pay overtime which increases employee stress, but is not a source of complaint since the extra pay is good.

Interestingly, employees in this alliance felt that their need to work harder could be attributed more to the adverse market situation outside Poland, the robustness of the Polish economy and the companies' efforts to remain competitive. Strategic alliances were viewed as an important way for companies to navigate this time of global economic uncertainty. Both Little Partners welcomed the work intensification, caused partly by the strategic alliances, as a source of employment security.

The engineering alliance shares this view. Here, the small partner has experienced greater work intensification and stress as a result of Big Partner requiring specific production configuration and work organisation. However this is, to some extent, compensated for by the fact that the length and stability of this relationship guarantees certain volumes of production. This leads to a feeling of job security and makes employees happier.

Those working in PPPs also seem to be subject to greater work intensification and greater stress. Some companies involved in the Transport PPP have experienced greater work intensification and stress not just because of the increased volume of work, but also because of the need, in order to keep the contract, to contain costs and increase worker productivity. The Municipality PPP also seems to have led to greater work intensification (mainly in the private partner) with employees having to work harder to meet tight deadlines. Similarly, those involved in the Climate Consortium Denmark PPP are experiencing greater stress due to increased workloads since they assume additional PPP-related responsibilities and have to meet additional deadlines. In the fourth, arts-related PPP, staff are also experiencing increased workloads and greater stress; however, this was perceived to be inevitable in arts event organisation, and not as a result of pressure arising directly from the partnership.

It is not clear what the impact of joint ventures has been on work intensification and employee stress levels. Although in certain cases, for example, Arkafund and IT Joint Venture, the general view is that they have resulted in greater work intensification and stress levels, such effects are attributable more to the nature of the work rather than the venture itself. For example, the work for those involved in Arkafund can be intensive and hectic at particular times, for instance when an investment deal is being put together. However, this has little to do with the venture itself. In the case of the IT Joint Venture, the venture itself has enabled international expansion and increased business volumes. As far as the other two joint ventures are concerned, that is Banking Joint Venture and European Logistics, they had no impact on the degree of work intensification and stress levels.

Similar findings emerged in the case of VCNs, in that although greater work intensification was recorded, for example in Virtuelle Fabrik, PLATO and SNS, this was attributed to the prevailing adverse market situation and the companies' efforts to remain competitive, rather than to involvement in this type of interfirm relationship. However, the over-reliance on remote cooperation and communication, the very distinctive features of a VCN, can sometimes be a source of tension and stress for those involved, typically managers and/or owners of SMEs. Interestingly, in one case study (SNS), one company's well-being programme is promoted through the network as an example of best practice of how to manage employee stress levels.

In two of the clusters studied (Medicon Valley, PharmAgora), the greater work intensification and employee stress levels were attributable to general business pressures, increased workloads, pressure on people to deliver and to 'do more with less', rather than the interfirm relationship. By contrast, in the other two clusters (Pannon Renewable Energy cluster and NutriBiomed cluster), greater work intensification and more employees were attributable, at least to some extent, to the individual company's cluster membership. The main reason is that membership has led to new business opportunities. The need for their employees to work in multiple projects with different partners, tight deadlines and competing requirements has contributed to higher stress levels. Moreover, the fact that they are both gradually raising their respective cluster's profile both nationally (Hungary, Poland) and internationally, means that they attract more projects, which also result in greater work intensification and stress levels. For one of these clusters (Pannon), employee stress levels have also gone up because the global financial crisis has hampered the cluster in securing funding/loans to meet pre-financing requirements necessary for cluster projects.

Another source of employee stress was directly linked to the matrix management arrangements, in several case studies involving cross-boundary working – for example, joint projects and employees under transfer. Here, workers were operating under several managers from different organisations, and sometimes lines of accountability were not entirely clear. This complexity sometimes created stressful conditions for workers, and was exacerbated by communication through the internet or telephone rather than face-to-face. However, several case studies showed that the increased business volumes and workloads resulting from some interfirm relationships can also improve employment security. Examples for this would be all four strategic alliances studied, including the Danish Arts Event and even looser forms of collaboration such as VCNs and clusters. For example, the ELMEH GIU VCN reduced the need for outsourcing by promoting the sharing of work within the network.

In addition, in a number of cases, for example, the Engineering alliance, the IT alliance, the Transport PPP, the UK/Polish food retail alliance and the MARCAR alliance, their increased business volumes and relative stability has led to an increase in employees for the companies involved. In certain cases, for example the UK/Polish food retail alliance, it has also resulted in workers on temporary contracts being given permanent ones.

However, it is also worth noting that in certain forms of collaboration, there is always the danger that a contract will not be renewed (as in the case of the Danish Arts PPP which has an annually reviewed contract). Similarly, members of the VCNs studied were not obliged to work with other network participants: firms are still competing in an open market.

Another advantage for some employees is the scope for greater work diversification. For example, as a result of the IT alliance the range of work undertaken has broadened and employees at Little Partner have more scope to volunteer for a range of projects. In addition, for many participants in cluster relationships, the work intensification was simply a result of investment in group meetings and discussions, which was often seen to be a valuable use of time.

Impact of interfirm relationships on employee well-being and stress levels

- Major impact: *Strategic alliances*
- Some impact: *Clusters; PPPs*
- No impact: *Joint ventures; VCNs*

Internal communication and information policies

Internal communication is mainly via the internet and intranets, supported by email and team meetings. In some cases, project managers are relied upon to act as go-betweens in cooperating organisations. Within joint ventures, there is evidence that organisational relationships have created a need for communication efforts but that partners have not been inspired to adopt new practices as a result of this collaboration.

Clusters adopted several ways of communicating, with particular emphasis on team meetings and internet-based communication, supplemented by project managers acting as go-betweens. Out of all the strategic alliances, the MARCAR alliance had the most strongly developed inter-organisational communication system. This involved dedicated project intranets, an intranet for alliance partners and joint problem-solving groups. These reflect the needs of a larger network with a greater number of partners and a particular commitment to effective communication.

Often, one of the main purposes of a VCN is sharing business intelligence and market information, and consequently communication between companies is often its main activity. There is not much evidence of impact on firms' internal communication methods, although there is some evidence of clearer instructions for workers and communication caused by the cooperation in Virtuelle Fabrik, while in other case studies the matrix organisations caused unclear accountability.

Across PPPs, communication practices were heavily influenced by the sector and the nature, longevity and extent of the collaboration between partners. Much of the communication at the Transport and Arts-related PPPs was focused on enabling joint delivery of the projects that were often perceived as challenging, both in complexity and timescale. Although partners at the Transport PPP and the Climate Consortium identified the need for more effective communication, they had not yet determined how to do this. The increased need for communication at the transport PPP is likely to be due to having some employees based off site and the collaboration between firms from entirely different sectors of technology and finance.

Impact of interfirm relationships on internal information and communication policies

- Some impact: *Clusters; Joint ventures; Strategic alliances; PPPs; VCNs*

Performance management and supervision

There seems to be some overall performance management in interfirm relationships, particularly when the firms are of different sizes and relative power. In some cases, larger partners (or indeed large clients) can apply stringent quality control and monitoring procedures to the work of smaller partners (as exemplified in the Engineering strategic alliance). However, this scrutiny and performance management does not seem to filter down to the level of individual employees. Generally, supervision, control and lines of authority and accountability were not influenced by interfirm relationships, and companies look after the performance of their own employees, with one key exception – joint project working (which may or may not involve employee transfers). This leads to considerations of performance management and supervision, and in many cases to some degree of matrix management. Those working for joint projects tend to be supervised and managed by the project manager of the host organisation (not necessarily the organisation employing the individual) to ensure successful completion. However, the individual also remains in contact with and is accountable to their own line managers. This can therefore, while the project lasts, increase the degree of supervision of team members. In interfirm relationships, there were examples of joint project working that involved project managers moving around companies to supervise team members who remained based in their parent company (requiring careful and regular communication), and examples where employees were transferred to the project manager's organisation (requiring careful guidelines to prevent poaching of staff).

Across the clusters explored in the research, only one reported any joint working. In the Pannon Renewable Energy Cluster members come together to perform specific joint projects, and they are increasingly interested in realising joint cross border projects. Each partner tends to work in isolation (and there is no real employee transfer) and project managers move around various work places, supervising the project team which can be based in various cluster members, coordinating and delegating various tasks and ensuring the work is undertaken and integrated effectively. The project manager is then accountable to the cluster manager in his/her own parent organisation. However, concern was expressed whether this arrangement would still work if the cluster grows.

Strategic alliances can involve joint project working and employee transfers. The MARCAR strategic alliance has developed specific methods to ensure effective supervision and management of project teams, based in various partner locations, and the researchers who move between them. However, generally, each partner is responsible for their own employees. The teams are led by project managers who can recruit members from across the partner organisations. It is these managers' responsibility to establish a strong working relationship within the team and to monitor progress and performance. However, the parent organisation continues to stay in touch (electronically) with their outsourced employees. In addition, as one of the smaller partners noted, supervisors can feel under pressure to comply with standards and expectations set by the bigger partner.

Joint project working can also occur among PPPs. The research into the Transport PPP has shown this can be difficult to manage, in order to ensure timely and effective project execution, as employees can be working in several locations and often abroad. Generally, the project manager assigned to a particular location is responsible for managing the relevant team. This ensures that transferred employees are managed effectively. These employees are also monitored by the parent company's HR department and managing director.

There appear to be few employee transfers and relocations in joint ventures, either between partners/ parent companies or to the separate joint venture entity. The organisations involved operate different systems of performance management. In the Arkafund joint venture, interfirm movement and employee rotation is encouraged and when employees are transferred they remain under the HR policies of their parent organisation (although these policies are designed to integrate). This was decided when setting up the joint venture, with the parent companies making a strict set of transfer rules to facilitate the forming, integration and movement of teams within and across the parent organisations. In the Banking Joint Venture, which has over 3,000 employees, some staff have been relocated from parent companies. Employees within the joint venture are matrix managed, and so managers may have responsibility for staff in different countries. This can create challenges for managers, as they are expected to travel and employees from different cultural backgrounds may have different expectations. The logistics joint venture involves staff from the different parent companies working together and often across national boundaries. These individuals remain employees of their parent company but work under control of the joint venture which organises the project work, assigns teams and applies quality assurance procedures.

VCNs generally involve many organisations working independently, and the potential (or arguably need) to influence performance management policies and practices is limited. However, at Virtuelle Fabrik managers said the network subtly influenced the way staff issues are handled by member companies, giving staff appraisals as an example. A more direct influence of the network on performance management is seen again when members combine forces and expertise to develop joint products. Although staff involved in this generally stay based at their parent companies, the work can involve cross-boundary working, increasing the complexity of people's work as well as stress levels. Joint projects are led by one member company, which supplies a project manager. Although he/she is responsible for team members and successful completion of the work, the employees will also have recourse to their original line managers from their parent companies. This arrangement needs careful and regular communication and clear instructions, which can be difficult when working internationally and relying on electronic communication. Staff working on joint projects may also need support to prioritise work and deal with competing work pressures.

Impact of interfirm relationships on performance management and supervision

- Some impact: *Strategic alliances; Joint ventures; PPPs; VCNs*
- No impact: *Clusters*

Flexible working arrangements and working hours

Overall, the impact of interfirm relationships on the approach to flexible work and work–life balance policies of partner and member firms and their employees was limited. In general, firms had their own approaches, policies and practices; and these could be markedly different not only between firms but across them, as not all staff were treated the same. Working arrangements of one firm were not directly affected or influenced by the arrangements in a partner or collaborating company. Instead, they tended to be affected by:

- the nature and make-up of the workforce (balance of male and female staff, age/life stage of workforce);
- the sector and type of work undertaken;
- company size;
- the legislation in the host country.

Many of the organisations consulted appeared to want to offer flexible working arrangements and to consider work–life balance issues. This was driven by considerations of corporate social responsibility and concerns over workers' stress, and also as a way of attracting and retaining key employees, particularly women, older workers and senior staff. The practices considered or offered included:

- home working (telework);
- generous maternity leave arrangements;
- working core hours but with flexible start and finish times;
- project working (temporarily changing work location);
- working part time, and paying for overtime or giving time in lieu.

Discussions with firms' representatives indicated that flexibility was also expected in return – that if employees could adjust their work hours to suit personal commitments then they would work more flexibly to meet the needs of the business in peak times, and to join project teams in different organisations/countries when the need arose.

There were indications that interfirm relationships could change the working patterns of some key individuals rather than affect a firm's entire workforce, particularly those individuals participating in joint projects. These individuals were often expected to work long and/or unsocial hours to meet project deadlines, to enable communication across country borders and time zones, and to maintain continuous production. Where individuals were temporarily transferred to another firm to undertake project work, they might also be expected to work to the patterns established in the host organisation.

Members of clusters reported no direct effect of interfirm relationships on their working hours arrangements or flexible working policies, or their work–life balance. Each organisation had its own approach, but in general the firms consulted tried to promote a good work–life balance for their employees and to offer flexible working such as improved maternity leave, flexible start and finish times and working from home. This may reflect the cultures of the countries in which the clusters operate (Hungary, Denmark and Sweden). However, flexible working did not appear to be available to all staff within individual firms, but only to some groups such as older workers with commitments outside work, and scientists who have greater control over their own work rather than production workers. Flexible working was regarded as a way to retain existing project managers (Pannon cluster), and to reduce stress among employees (Medicon), but staff were also expected to:

- work flexibly;
- work with other member companies in different locations;
- work away from home if necessary;
- work longer hours.

In strategic alliances, again there appeared to be, generally, no direct effects of interfirm relationships on the working patterns of employees, as the firms involved act as autonomous organisations. However, those employees involved in joint projects resulting from the alliance, particularly those on a transfer, could be directly affected. In the MARCAR strategic alliance, project managers set the working hours of their teams (following the established procedures of their own company) and there are indications of people working long hours to meet deadlines, with them being expected to commute or to work away from home. Some compensation, such as time off in lieu, was given for this. In the IT-based strategic alliance, again there were reports of significant informal flexibility in work time (varying start and finish time, and working long hours, unsocial hours or weekends when necessary).This facilitated liaison with clients in different time zones. In the Engineering strategic alliance, the small partner established a three, eight-hour shift pattern to enable continuous production of a line dedicated to the big partner (with no flexibility within this working pattern). In the food manufacturing and retailing strategic alliance, one small partner had a mainly male workforce working a full-time 40-hour week with no real flexible working or consideration of work–life balance issues. In contrast, the other small partner in the strategic alliance had a 50% female workforce and was conscious of work–life balance issues in attracting and retaining female staff, and encouraged employees to work from home a few days a week and allowed part-time working. This small partner also worked closely with the large partner in the alliance to exchange ideas around work–life balance considerations.

Each organisation in PPPs had its own approach to flexible working depending on the role of its employees and the nature of their work, with an acknowledgement that projects needed some employees to work long hours to meet deadlines.

Working patterns and practices in joint ventures again were dictated by the parent firms' sectors or the countries in which they operate. They did not appear to be affected by the interfirm relationship. For Arkafund, each parent company operates in industries that demand flexibility (banking and media) and so has flexible working hours and offers the chance to work from home. However, there was some suggestion that this required close monitoring to ensure employees did not take advantage. In the logistics joint venture, working arrangements were dictated by considerations of safety for their drivers.

VCNs appeared to work well when the firms involved had similar policies towards flexibility. Networks also promoted the sharing of knowledge, expertise and experiences which could indirectly influence the practices of members. VCNs also bring together firms in either a similar sector or a particular geographical location and this shared experience/context could also lead to a similar approach to working patterns. For example, although the Supply Network in Shannon had no formal alignment of HR policies, it reported similar policies towards working arrangements as all member firms operate within the highly regulated employment environment in Ireland.

Impact of interfirm relationships on flexible working and working hours

- Some impact: *Clusters; Strategic alliances*
- No impact: *Joint ventures; PPPs; VCNs*

Equality and workforce diversity

Policies around equality and diversity were largely driven by legislation and considerations of good practice rather than the impact of interfirm relationships. Discussions tended to focus on gender equality rather than on issues surrounding age, culture or sexual orientation.

Some small firms reported that they had no formal policies. Nevertheless, Pannon member companies could, informally, compare policies and follow each other on equality issues. However, discussions suggested that larger firms and/or those with an international presence were more advanced in their considerations of equality and cultural diversity, and sometimes attempted to influence the policies of their smaller partners. For example, in the Engineering strategic alliance, the large MNC partner required the smaller partner to sign up to its code of conduct for suppliers, which included anti-discrimination and equality provisions linked to applicable laws and industry standards of the countries in which they were operating.

Although policies did not appear to be affected, attitudes to diversity may be influenced by interfirm relationships. Joint working was felt to enhance diversity in participating organisations. The Transport PPP and the IT strategic alliance showed that multi-disciplinary, cross-functional and international team working could promote cultural awareness, although it was acknowledged that this did present challenges, particularly in helping team members to integrate into the culture of their host organisations.

Impact of interfirm relationships on equality and diversity

- Some impact: *PPPs*
- No impact: *Clusters; Strategic alliances; Joint ventures; VCNs*

Health and safety at work

Legislation plays a far more important role in shaping health and safety (H&S) at work policies than any type of interfirm relationship, with the possible exception of those strategic alliances that are akin to supply-chain relationships. This was exemplified by the Engineering alliance, where Big Partner has had a major impact on the H&S policies of Little Partner. The onus is on the latter to comply with Big Partner's Code of Conduct, which covers a raft of regulations, including H&S. There is evidence that Big Partner has contributed to enhancing the Little Partner's approach to H&S in specific instances. For example, Little Partner must adopt a training package developed by the Big Partner that covers the transfer of products safely between suppliers and the Little Partner.

The interfirm relationship has also had some impact in the UK/Polish Food retail alliance. For example, an issue arose about two years ago over the speed of lorries arriving from Big Partner to load stock from Little Partner 1's warehouse. Big Partner responded swiftly, reminding drivers of speed limits and fining them if this speed was exceeded. In general, Big Partner closely monitors its suppliers to keep a check on a variety of aspects, including hygiene and safety. Local suppliers are required to meet the high standards of hygiene demanded for food safety reasons by its microbiology team. If conditions are found to be below standard, Big Partner will review its relationship with the supplier.

In most other case studies, the interfirm relationship did not have any impact. That said, in the case of the Medicon Valley cluster, H&S practices at the Big Pharmaceutical company set the standards that the smaller firms have to follow. It is common for smaller firms to send representatives to this company in order to learn about its H&S practices. It is not mandatory for companies in the cluster to comply with Big Pharmaceutical's H&S practices, but they may feel that, by doing so, they are more likely to develop a business relationship with it. As a result, it can be argued that cluster membership is likely to exert some influence here.

Interestingly, in the Pannon Renewable Energy cluster, respondents said H&S policies are being discussed by cluster members, who are increasingly aware that they need to develop a more structured, joint human resources strategy. However, to date the cluster has not had an impact on its members' H&S policies. According to one view, this may be due to the fact that the cluster is not a legal entity, and as such cannot force H&S regulations on its members.

Impact of interfirm relationships on health and safety at work

- Some impact: *Strategic alliances*
- No impact: *Clusters; Joint ventures; PPPs; VCNs*

Grievance and disciplinary procedures

In the various types of interfirm relationships studied, grievance and disciplinary procedures remain within the control of individual companies. Only two joint ventures seem to have integrated grievance and disciplinary procedures. In the Banking Joint Venture, there is a common HR procedure, but this is tailored to each country to take account of local legislation. Similarly, in the case of the IT Joint Venture, the managing directors of the Romanian parent and the Bulgarian parent meet annually to discuss project deadlines. At these meetings, information is pooled and disciplinary issues for employees are discussed, if necessary.

It is worth noting that, although the various types of interfirm relationships do not seem to have a direct impact on these procedures, in some cases it may exert an indirect influence. In the case of the European logistics joint venture, although these procedures remain under the formal control of the parent companies where the delivery and installation staff are concerned, there are formal assurances from the European joint venture about the quality of service offered to the customer and the quality control procedures associated with the safe transportation of goods or equipment. As was suggested, this may provide some extra pressure for managers in the parent firms to ensure that disciplinary matters are followed up.

In most cases, grievance and disciplinary issues arising from interfirm collaborations, such as joint projects, are dealt with informally and through the assigned project manager. This approach is common across all five types of interfirm relationships – for example, Virtuelle Fabrik VCN, Transport PPP, Pannon Renewable Energy cluster, Arkafund joint venture, and Engineering alliance.

Impact of interfirm relationships on grievance and disciplinary procedures
■ Some impact: *Joint ventures*
■ No impact: *Clusters; Strategic alliances; PPPs; VCNs*

Employee representation and collective bargaining

There is a need in interfirm relationships, as reflected in the case study findings, to develop new arrangements and structures for employee representation and collective bargaining that span organisational boundaries. In 18 out of 20 cases, the interfirm relationship did not have any impact on these issues. They are still handled at company (and/or sectoral level) rather than being organised around the particular type of interfirm relationship. Moreover, certain types of interfirm relationships, most notably VCNs and to some degree clusters, involve loose forms of cooperation among SMEs which, in the main, do not have collective bargaining arrangements.

In cross-border collaborations, in most cases each partner has their own employee representation and collective bargaining arrangements, which are also affected by the specific country and institutional framework in which they are based (for example, MARCAR alliance, UK/Polish food retail alliance, the Banking Joint Venture). Interestingly, this can itself be an issue. In the case of the UK/Polish food retail alliance, although the interfirm relationship did not have any impact in this area (that is, no changes were made), the different employee representation and collective bargaining arrangements that exist in the various partners can be a cause of friction. In this case, there is frustration in Big Partner's management (which does not recognise trade unions) about the use of co-determination by Partner 1, which is also made aware of this frustration.

Some impact from an interfirm relationship was detected in two cases, but this was not extensive. In the case of the Engineering alliance, although there is no specific information and consultation procedure that covers the relationship between the big and little partners, any issues related to this collaboration are regularly raised in the monthly meetings that are held between employee representatives and managers.

In the case of the Banking Joint Venture, whose headquarters are in Denmark, its employees are represented via a works council. Danish law requires all organisations employing over 35 employees to have a works council, if desired by its employees. In this case, there are two employee representatives on the works council. The way in which the joint venture works and communicates with the unions depends on the legislation in each country. The employees in the Baltics and Poland have their own employee representation and collective bargaining arrangements.

Interestingly, the Medicon Valley cluster has an indirect impact on collective bargaining. It creates a vibrant local/regional labour market by encouraging the concentration of research organisations, thus opening up opportunities for certain employee groups – for example, lab technicians. This, in turn, increases their labour market power and can result in higher salaries.

Impact of interfirm relationships on employee representation and collective bargaining

- No impact: *Clusters; Strategic alliances; Joint ventures; PPPs; VCNs*

Alignment of HRM between partners

The type of interfirm relationship seems to determine the extent to which the HR policies of the different partners are aligned. Not surprisingly, in looser collaborations such as clusters and VCNs, HR policies do not tend to be aligned or integrated. In clusters there is greater interest in developing alignment and in VCNs HR practices can be mutually influenced. The scope for HRM alignment has been greater in joint ventures, PPPs and strategic alliances. In some of the alliances, there was partial alignment in key areas through the larger companies' selection of the smaller organisations as partners. Alignment was stronger within the PPPs, where it was stimulated by private and public sector service organisations working together, than within the joint ventures, where alignment depended on the nature of the partnership.

The clusters – for example, Pannon Renewable Energy and NutriBiomed – showed a growing realisation that there is a need to develop joint HR policies. One of the reasons for this is that cluster members expect to work more closely together which, in turn, means that agreement on managing staff directly affected will become increasingly important. The Pannon cluster is developing a joint strategy to cover HR issues such as education and training. Members of the Medicon Valley cluster, although having no formal interfirm alignment, all tend to have progressive HR policies as they share the goal of attracting the best scientific talent to that region. This reflects the role of sectoral pressures through common labour markets in influencing similarity of HR practice, rather than deliberate efforts on the part of organisations to harmonise their practices.

In the case of VCNs, there is no evidence of formal alignment, but some mutual adaptation has occurred, mainly through mutual learning. For example, some elements of company-based HRM have been affected through the informal contacts initiated by the SNS. Participants at SNS network meetings have exchanged information on:

- how to retain good/skilled staff;
- the impact of the minimum wage;
- how to cut costs through sharing staff whose services are required at irregular intervals.

It can be argued that in some strategic alliances, such alignment was not caused by the collaboration, but rather, was a factor that was decisive in the selection of the partner. In the case of the UK/Polish food sector alliance, all three companies have a strong focus on quality and innovation as part of their competitive strategies, which, in turn, led to some attempts to adopt 'high commitment'/'high performance' work practices. Agreeing on 'best practice' HRM remains, however, contingent upon the attitudes of the companies involved. For example, Little Partner 2 recognises the importance of career development and promotion and encourages these practices, but finds that is has limited capacity to implement them because it is small. The strategic alliances examined are unlikely to have occurred if there had not been pre-alignment of strategy and HR practices through each organisation carefully selecting their partners. Big Partner vetted possible partners on their work practices in order to preserve its reputation. At the IT software alliance, Big Partner was reassured of Little Partner's suitability by assessing its cultural fit into the alliance, which includes the approach to staff management. In the Engineering alliance, the dominant partner has imposed particular production and quality specifications on the smaller supplier, resulting in greater performance requirements from workers. Here, the interfirm effects on HRM were almost veering one way. Although this could result in quality improvements, it can also be a challenge for HRM, as workers may experience greater stress and less autonomy.

Three out of the four PPPs studied also highlighted some HRM alignment. In the arts-related PPP, the partners have not attempted formally to align their HR policies, but Arts Organiser and Arts Promoter are acutely aware that they are both working towards the success of ArtsFest. As a result, considerable effort is made to ensure that management and deployment of employees are coordinated between partners. In contrast, in the Transport PPP, private contractors have an agreed HR strategy with the consortium that, in broad terms, covers getting the right people to do the right kind of job, to make sure employees are abiding by the rules and to avoid any significant inconsistency with the HR strategies of other members of the consortium.

There is no joint HR strategy for the Municipality PPP, although there has been a degree of informal alignment. Specifically, the municipality, being much larger than the private contractors and having well-developed HR policies, has repeatedly tried to make them adopt HR practices similar to its own, and it expects this will be achieved soon. Within this type of alliance, the rights of employees under transfer are protected by underpinning national and EU legislation.

In three out of four joint ventures, a degree of HRM alignment could be detected, but the strength of this alignment is much weaker than in the PPPs. In the Banking Joint Venture, the new entity has 'borrowed' HR policies from the parent companies, in particular from the larger partner. In the case of the IT Joint Venture, the new entity has helped the parent companies to work together on a global platform, for which a centralised HR structure is being developed. In the case of the European Logistics joint venture, there is some integration of HRM through knowledge sharing between the parent companies, and the need for quality assurance and consistency. Quality assurance procedures have been formalised in order to offer clients a consistent standard across Europe, and are expected to contribute to greater HR alignment in certain areas. However, policies in most areas are not aligned as this is seen as unnecessary, and because the parent companies continue their national operations.

Impact of interfirm relationships on HRM alignment between partners

- Some impact: *Strategic alliances; Joint ventures; PPPs*
- No impact: *Clusters; VCNs*

Conclusions 4

This project set out to identify the positive and negative impact of interfirm relationships on employment, including human resource management (HRM) practices and working conditions. The methodology was qualitative and involved 20 case studies, each of which included at least two organisations and interviews with management and employees or their representatives. Cross-border relationships and those involving NMS within the European Union were of particular interest.

There are still very few studies that examine employment issues beyond the context of the single organisation and/or sector, which is hardly surprising given the way in which HRM, industrial relations and employment law are traditionally defined. Similarly, most HR publications focus on concepts such as organisational commitment, employee engagement and person–organisation fit, all of which assume employment relations are firmly based at the level of the individual organisation.

Unfortunately, these contributions do not offer much theoretical or practical value at the multi-employer level. Simple notions of authority, distinct hierarchies and structures, patterns of work organisation and forms of employee representation take on a different meaning in these contexts – and none is straightforward. For example, questions arise in multi-employer networks about who is the employer, both contractually and informally, as individuals employed by one organisation can find that their specific tasks are managed by a supervisor from another organisation – such as in a strategic alliance or PPP. As for communication, workers are subject to formal and informal messages from managers working for different employers – for example, when a joint venture is set up or a cluster of firms work together on a project. In the latter case, teams of workers from different organisations may work together on a research and development project, the development of a new product or the provision of a service. Furthermore, workers collaborating across traditional sectors or internationally can find their terms and conditions shaped by different laws or that they are represented by different trade unions. The study's conclusions present firstly an analysis of the various dimensions of HRM where the impacts by type of interfirm relationship were most and least powerful. A summary of this analysis is presented in Table 4.

Table 4: Impact of interfirm relationships by aspect of employment/working conditions

Impact on	Strategic alliance	PPP	Joint venture	Cluster	Virtual network
Training	Increased, either because of requirements by the dominant partners (directly or indirectly, for example, via product requirements) or because of (informal) exchange/benchmarking among management	Limited impact, rather (cross-cultural) networking competences gained	Joint training and informal know-how exchange among affected staff	Joint training, also with active involvement of education providers	• (Cross-cultural) networking competences (mainly for high-level staff) • Informal exchange/benchmarking among management
Work organisation	Work intensification and sometimes diversification if dominated by one partner	Work intensification and sometimes diversification (mainly in the private partner)	None	Work intensification due to increased business opportunities	Informal exchange/benchmarking among management
Employee well-being (strongly related to work organisation)	Increased stress due to work intensification in the dependent partner	Increased stress due to work intensification in the private partner	None	Increased stress due to work intensification	Increased stress due to work intensification and virtual nature of the cooperation
Cross-company mobility	• Transfers from dependent to dominant partner • Cross-company labour market after project end (if geographically close)	Limited (if so, then secondment/ transfer from the public to the private partner)	Limited (sometimes secondment from parent companies to joint venture)	Establishment of regional labour markets (including education provision)	• Limited (some transfer of management staff) • Cross-company labour market after project end or in economically difficult situations (if geographically close)
HRM alignment	Already alignment in the framework of looking for partners	Formally or informally, mainly public partner influencing private partner	Joint venture is influenced by the parent companies	Limited (only in large, long-established clusters)	Informal exchange/benchmarking among management
Compensation	• Geographic influence more relevant than alliance membership • If among peer companies > benchmarking • If one dominant partner > increases at small partners to retain employees	Sectoral/geographic influence more relevant than PPP membership	Partly joint decisions for joint venture staff, but no influence on parent companies	Sectoral/geographic influence more relevant than cluster membership (but region itself might be influenced by the cluster)	None

Contracts/terms	• Increased employment levels • More job security Particularly for dependent partners	• Increased employment in private partners • Partly adaptation of private partners' employment terms towards the requirements of the public partners	Limited (some transfers from parent company to joint venture)	None	None
Internal communication	Limited (increased information about the cooperation and the dominant partner)	Tendency for increased communication due to complexity of the projects	None	None	Limited (better instructions/ information provision)
Equality/diversity	Limited (some influence of dominant on dependent partners if included in Codes of Conduct)	Limited (some influence in case of joint teams)	None	None	None
Health and safety	Limited (some influence of dominant on dependent partners if included in Codes of Conduct)	None	None	None	None
Supervision	• None, except of matrix organisation in case of joint project teams or secondment • In few cases informal exchange/benchmarking among management				
Grievance	None	None	Influenced by parent companies	None	None
Industrial relations / collective bargaining	None	None	None	None	None

It is evident from Table 4 that the impact of inter-organisational collaboration on employment and working conditions depends on the form of relationship. Although it is difficult to generalise from a relatively small sample, especially with research conducted across a range of EU countries, it was apparent that the effects were stronger in long-term strategic alliances and joint ventures. This finding also reflects the fact that these two types of inter-organisational relationship were more likely than the others studied to cross borders. The effects on employment were particularly apparent in areas such as training, work organisation, cross-company mobility, compensation and contracts. These areas were seen as important elements of employment and working conditions as they directly affected issues concerning customer service, product quality and employer brand. In short, collaboration in these contexts was driven by a feeling that it would increase companies' competitiveness and/or help them survive in a difficult business environment.

In general, training and career development opportunities had a greater effect on companies and, in some cases, opened up opportunities not only for staff but also in the wider labour market. A marked effect was also found in terms of work intensification. The demands of setting up new relationships were intense and some of the work involved in all five types of interfirm relationships was project-based which involved significant effort to meet deadlines. Employees and managers, however, tended to accept these disadvantages in return for the perceived benefits of enhanced job security and, to some extent, work diversification. The type of interfirm relationship also determines any impact on employment terms and conditions. In clusters and virtual company networks (VCNs), which represent looser forms of interfirm relationships, there is a relative lack of contact between employees in the different firms involved about employment terms and conditions. In general, the VCNs studied appeared to pay little attention to how differences in employment and working conditions might undermine collaboration. Apart from some impact on training and a limited amount of cross-company mobility, most of these firms continued much as they had done before. Firms in clusters relied on each other to produce better solutions for customers, and this led to some joint training, the establishment of regional labour markets in some cases and increased stress. However, for some cases, it has not been possible to detect whether cluster membership can cause work intensification, or if it would have been experienced in any case, if the firms had remained independent. They could, for example, have experienced greater work intensification because they had no cluster to buffer them from difficult product market conditions. Interestingly, respondents viewed collaboration as necessary for business competitiveness and survival rather than in terms of employment and working conditions.

A varied degree of impact was observed in the other three types of interfirm relationships. In strategic alliances, the increased business volumes between partners have led to a greater number of staff and employment security. Other aspects of HRM were influenced more significantly by the presence of statutory regulation, including health and safety, flexible working and diversity and equality issues.

Areas where the presence of an interfirm relationship had least impact include grievance and disciplinary procedures, as well as employee representation and collective bargaining. In most cases, grievance and disciplinary procedures were seen as being the sole responsibility of the individual company. Any grievance and disciplinary issues that arose as a result of an interfirm relationship, for example joint projects, were typically addressed informally and/or through the assigned project manager. The only exception here is the joint venture, where the grievance and disciplinary procedures of the new entity seem to be considerably influenced by parent companies.

In the vast majority of cases, the interfirm relationship did not have any impact on employee representation and collective bargaining arrangements. Such issues are still handled at company (and/or sectoral) level, and are indeed regarded by companies involved in interfirm relationships as completely outside the scope of the collaboration. The fact that both the employment relationship and employee representation still focus on a single employer increases the difficulty for cross-organisational bargaining arrangements. Moreover, in the case of cross-border collaborations, each partner has its own arrangements for employee representation and collective bargaining, which are also affected by the specific country and institutional framework, thus hampering any cross-border bargaining. In addition, certain types of interfirm relationships, most notably VCNs and to some degree clusters, involve loose forms of cooperation among SMEs which, in the main, do not have collective bargaining arrangements. However, this continued focus on the single employer and/or sector, within a specific country, may reduce the development of appropriate strategies to deal with the effect of interfirm and cross-border relations on employment and collective bargaining. This all suggests that the notion of social partners needs to be redefined to allow for consultations along supply chains and across borders rather than simply within companies or sectors confined to a specific Member State.

The effect of an interfirm relationship on employment and working conditions varies according to the (relative) size of the companies involved. Not surprisingly, this effect is greater in smaller (dependent) organisations cooperating with larger (dominant) entities. For example, in strategic alliances or PPPs, smaller partners tend to accommodate a wide range of requirements by the larger (dominant) companies, many of which have an impact on production/work organisation, training, as well as health and safety. However, smaller companies should not be seen as passive actors in these collaborations. Several of the case studies show that smaller organisations have deliberately sought out such relationships, by aligning their practices, including aspects of HRM, with those of potential big partners.

It is evident that overall, because interfirm relationships are primarily formed for business reasons, organisations often give a limited amount of consideration to the employment implications of these relationships. In some cases, this led to managers underestimating the effects on aspects of HRM. Some organisations reported plans to improve aspects of their joint working particularly focused on building shared values through training and by improving project-related communication. In several cases, organisations said they planned to develop joint approaches to HRM practices, because they had realised this would make their partnership function more effectively.

Where organisations gave limited consideration to HRM within partnerships, most consequences were unintended and, therefore, sometimes not recognised. Lack of managerial awareness of these issues may also occur when effects appear gradually, or in a new relationship, because they have yet to emerge. It is also clear from discussions that the impact of collaboration on HRM varies significantly even among firms with the same type of contractual arrangement.

Possibilities for learning and current limitations

Many of the organisations recognised and valued the possibilities for learning about developments in technology and product innovation, or to support the development of human capital across organisational boundaries. Indeed, some had entered a relationship for this purpose. In particular, some of the organisations joining clusters and VCNs were committed to developing their understanding of sectoral developments. Arguably, this has, in some cases, indirectly influenced the HRM of member companies, for example by highlighting the increased need for skills-related training, increasing awareness of wage developments and comparing wages. In addition, both forms of interfirm relationships promoted (informal) knowledge exchange and benchmarking standards among managers. However, some of the case studies show that organisations may be seeking and evaluating potential partners on the basis of their similarity, affinities and cultural fit. This may limit the possibilities for transfer of good practice – including that of HRM – because organisations will be characterised by a high degree of similarity (see section on HRM alignment).

Organisational size and patterns of relationships

There is a clear pattern across some of the PPPs, joint ventures and strategic alliances, where the HRM practices of small (dependent) partners are shaped either by the specified requirements or broader influences of larger (dominant) partners. The case studies show that this caused work intensification and greater stress for employees in the smaller organisations. However, in some cases it was clear that, because of the market environment, small organisations took the initiative to make changes (such as good practice in employee relations) rather than yielding to the demands of individual clients.

The influences of smaller organisations on each other ('peer companies') are less profound. In part, this reflects how organisations of different sizes (and 'market power positions') were distributed across different types of relationship: organisations in clusters and VCNs were commonly SMEs and these types of relationship are commonly weakly modular with low levels of interdependence and weak ties between the organisations involved (Marchington et al, 2009).

Occupational and sectoral labour markets

A noticeable feature of the relationships between some organisations is that their impact and effects are moderated through various types of changing internal, occupational and 'extended' labour markets (Lam, 2007).The experience of working in an interfirm collaboration offers many workers the opportunity to increase their skills and, therefore, may make them more valuable in the wider labour market. The state of occupational, national and sectoral labour markets intersect here. Employees in biopharma/life sciences and IT sectors, as well as graduates in particular economies such as Poland, have been able, albeit to a different extent, to capitalise on their bargaining power with beneficial effects on their pay. Equally the existence of interfirm relationships may be helpful in cushioning the impact of recession and weak labour markets, as in the case of the SNS VCN. In the current economic context, it is worth considering how public policy instruments can be used to foster the interfirm transfer of redundant or surplus labour.

Dynamics of power and trust

Inter-organisational relationships are formed for many reasons. These shape not only patterns of power, dominance and control between the partners but also their employment and working conditions. The case studies show that stronger (and typically larger) partners in strategic alliances were able to shape levels of training and pay at their smaller, supplier partners, as well as intensifying work and increasing stress levels. Previous research (Marchington et al, 2005; Sinclair et al, 1996) supports this and has shown how pre-existing power imbalances are reflected in the goals of inter-organisational relations as well as in subsequent employment and working conditions.

Similar outcomes could be found in PPPs but less significantly, and in contrast to earlier studies which tend to identify patterns of private sector dominance in PPP forms (Hebson et al, 2003; Grimshaw and Roper, 2007). The UK studies reflect the weakness of the public sector providers in some of these PPPs and the relatively tangential and low-skill nature of the work undertaken by some of the contractors (for example, cleaning by small firms). Respondents among the looser clusters and VCNs found it difficult to identify any specific impacts of their collaboration on employment and working conditions, apart from joint training of staff working on the same contract and the promise of greater employment security if the network managed to generate more orders. However, given these were primarily smaller and relatively young organisations, respondents did not feel there were substantial differences in power between them – and therefore it was unlikely that one organisation would dictate terms to the others. Even so, in the case of interfirm collaborations in which smaller organisations were working together – for instance, in clusters or in VCNs – issues of dominance and control were marginal.

In relation to modularity (which refers to the level of interaction between firms in a network), some forms of inter-organisational relations are tighter than others, in the sense that there are multiple levels of overlapping between the collaborating organisations, not only at the level of senior management but also through the activities of boundary spanning agents at departmental level and teams of workers that come together on projects. For example, strategic alliances, PPPs and joint ventures rely on close contacts to meet shared organisational objectives. Moreover, they tend to last for longer periods of time; as in the case of PPPs, rather than the more transient relationships in VCNs. Boundary spanning agents (Williams, 2002) occupy a critical role in making interfirm relations work effectively, and in implementing goals through day-to-day communication. In looser networks, such as clusters, different firms rely on each other for the completion of particular projects and to meet short-term demand, but then operate quite distinctively in other areas of business. In this situation, weak and transient ties were found.

Combinations of risk and trust can be reassessed using the Ring and Van de Ven (1992) typology and applying this to the case study evidence reported here. The findings seem to support the use of this typology. For example, in long-term strategic alliances, large partners do not appear to take advantage of the smaller partner's weaker position to downgrade employment and working conditions in order to get a cheaper deal. There is a relatively high level of trust which, in turn, acts as a risk-mitigating factor. More particularly, a high level of trust results in stable business relations and employment security. Rather than any undercutting, attempts are made by both parties to preserve the relationship as it offers greater security for the smaller partner and greater reliability for the larger partner. This is translated into support for stabilising employment relations in the smaller partner because it is the larger partner's interest to maintain a consistent, good quality supply of products.

For the supplier firm, as seen earlier, this can mean improvements in pay and employment security, at least in the medium term, and support for training. Joint ventures are seen as high risk/low trust, but as these forms of inter-organisational relations lead to the formation of a new entity, staff are either transferred to or seconded to the new firm. In the case of the former, workers previously employed by either of the parent companies find that their terms and conditions can change, possibly for the worse (Baron and Kreps, 1999; Marchington et al, 2011). Alternatively, if they are seconded, employment and working conditions can remain in line with existing agreements in each parent company, and in this case there can be inconsistencies between workers from different parent organisations. Either way, there are potential contradictions and complexities when staff work across organisational boundaries. In clusters and virtual networks, which are more likely to be low risk and high trust, the partners remain separate from each other in legal and employment terms, engaging purely to increase their chances of success in exploiting market opportunities. As seen already, employment and working conditions may be little affected in these circumstances.

Finally, there is some evidence of interfirm relationships being formed where organisations realise their potential partner is not a direct competitor and therefore does not present a threat. This is evident in memberships of VCNs, clusters and even some of the joint ventures and strategic alliances. This illustrates a key tension between collaboration and competition. Companies sometimes said they could not make comparisons about fellow members' HR practices because of sectoral differences or lack of similarity; however, it seems unlikely that they would be willing to collaborate with a direct competitor. It also raises the question of how best to promote common non-sector specific standards of good HRM practice across borders. This may require a more active cross-border involvement of social partners.

HRM alignment

Attempts to align organisational goals between partners and to achieve more integrated HR strategies and practices is likely to occur only in specific inter-organisational forms. These are characterised by:

- close cooperation on production or research projects;
- joint working between the partners;
- a recognition that it is important for business success (and/or survival) to iron out inconsistencies in employment and working conditions across the network (Marchington et al, 2011).

Thus, a long-term strategic alliance committed to providing high-quality products and good levels of customer service is more likely to focus on ensuring employment and working conditions are similar between the partners, or at least are improved in the weaker organisation. Conversely, in a strategic alliance along a supply chain that relies on cheap goods, the client pays little attention to employment and working conditions at the supplier unless there is a good business reason for doing so. It has already been noted that, at the PPPs examined in this study, workers at the private sector firms tended to fare less well than their public sector counterparts and there was little attempt to align the two.

Interestingly, it also became apparent during the interviews and subsequent analysis that this study's focus on changes to employment and working conditions following the creation of the new organisational form overlooked the fact that partners were often chosen on the basis of similarities before the inter-organisational relationship was created. That is, rather than face problems after a strategic alliance, joint venture or PPP had been set up, it was better to search for suitable partners prior to making the decision to collaborate. Significantly, the term 'suitable' here refers not only to technical aspects in terms of the partner's ability to provide the product/services looked for in the required quality and time, but also to 'soft elements' such as codes of conduct, business ethics and HRM. This seems an obvious line for commercial and efficiency-oriented organisations to take, but it does make it harder to assess the precise impact of new inter-organisational forms on employment and working conditions.

In a sense, both partners may change things in advance so as to ensure the deal goes through, given their perception of what the other is looking for. Indeed, while respondents reported how they viewed the relationship with their partner in the various forms of interfirm collaboration, one can never be certain that either party is able to judge their partner's intentions. For example, in a strategic alliance along the supply chain, smaller partners often report on how business is now more secure since the alliance was formed; but this tends to underestimate the changes that have taken place to maintain the relationship or the fact that the firm may now be totally dependent on continued business through this supply chain and may be forced to make further changes in the future merely to retain the contract. Such dependency also makes the resulting increase in job security quite relative because if the firm loses this one client, it is likely to fail and jobs will be lost. Finally, it is worth noting that integration of HR policies and practices was often not undertaken as a part of a strategic decision but happened as a matter of course – although closer relationships, such as joint ventures, were more likely to involve at least some discussion amongst partners about how to make employees' pay fair. Practices tended to be more integrated than policies, especially where relationships were quite new.

Regulation

A number of elements of HRM practices did not appear to be affected by interfirm relationships because uniformity of practice was encouraged by the presence of national employment laws. These included flexible working, equality and diversity issues and, in most cases, health and safety. To some extent, collective bargaining arrangements were also affected by the existing institutional framework, including regulation. Additionally, because of the presence of legislation, some organisations were inspired to seek to implement good practice above the statutory minimum. In a small number of cases however, the desire of large organisations to comply with such legislation filtered down to their small partner firms which, up to then, did not appear to have been fully compliant.

Policy pointers 5

This study has highlighted a number of areas with clear implications for policy and/or future research. First, as various types of interfirm relationships proliferate, both within and between the EU's Member States, the organisations involved will need more help to address the HR implications. Such support could include advice when establishing such relationships; for example, through lawyers who help draw up legal agreements. The availability of such support should also be accompanied by a concerted effort to raise awareness among the social partners in both public and private sectors about the need to address employment issues that are pertinent to interfirm relationships before – that is, at the setting up/design phase rather than after the business collaboration has been established and is in operation.

Linked to this is the need to think about interactions between EU regulations, national legislation and company policy, and specifically EU-wide directives in terms of how these are translated into national law and then implemented within organisations involved in interfirm relationships, with particular emphasis on the growing number of cross-border collaborations.

More fundamentally, policymakers and social partners need to reconsider the way the prevailing employment relationship/contract is configured – for instance, around the concept of the single employer. Yet, employees and managers will increasingly find themselves working in networked organisations, liaising with multiple employers and, in some cases, pursuing 'boundaryless careers' (Arthur and Rousseau, 1996). This, in turn, requires policymakers to become more closely involved and examine the way organisational employment policies can shape employment arrangements between firms (Rubery et al, 2010).

Another finding has been that for some types of interfirm relationships, most notably clusters and VCNs, public funding (either national/regional and/or European) has been instrumental in both their setting up and initial membership. This has been particularly true for SMEs. As a result, there is a need to take into account the potential consequences for such companies as and when this funding ends as well as to consider policy initiatives to enable networks to become self-sustaining.

Linked to this, there is a need to try to stimulate awareness of learning opportunities about HRM practices across SMEs; for example, by making them realise that interfirm relationships offer more than just joint product development or marketing opportunities. Indeed, here is a policy question of how best to support SMEs to optimise potential benefits of benchmarking and cross-organisational learning, without losing the value of informal exchanges identified within some of the cases where individual relationships between senior managers were the primary mode of contact.

This study also has some major implications for social partners. First, in some of the relationships, there is evidence of a cross-border employee representation gap. While unions have made significant efforts to develop strategies to introduce or improve cross-border representation (Traxler et al, 2003, 2008, 2009), these are often predominant in large multinational companies, fostered by the requirements of the European Works Council (EWC) directive. Several smaller organisations studied are covered by national employment regulations that do not extend across national boundaries. There is also some evidence that employees in SMEs experience a lack of representation by social partners, particularly in a sector like IT or in the NMS. This implies that social partners may wish to consider how they can help improve employee representation along supply chains and across borders rather than focusing on single companies or sectors within a specific Member State. For example, the concept of social partners needs to be redefined to allow for consultations along supply chains and across borders.

This study also identified a number of research gaps. For example, the specific role of large multinational corporations (MNCs) in forging interfirm relationships and spreading employment-related policies and practices, which was not extensively covered by this research, could be explored in greater depth. Crucially, there is also the need to acknowledge diversity within relationships of the same type and to model, in more detail, the factors that lead to different outcomes within the same type of business collaboration.

In view of the current economic uncertainty, it might also be useful to examine the degree to which interfirm relationships and the 'informal' interfirm labour market that some of them generate can mitigate unemployment. In other words, it is worth exploring whether collaborating organisations are picking up surplus labour in recessionary times (as was found in some VCNs). If this is the case, one should also explore how can this be supported by relevant policies.

Bibliography

Allen & Overy, *Joint ventures in Central and Eastern Europe: A perfect European Union?*, Allen & Overy, 2009.

Almond, P. and Ferner, A. (eds.), *American multinationals in Europe: Managing employment relations across national borders*, Oxford, Oxford University Press, 2006.

Arthur, M. and Rousseau, D. (eds.), *The boundaryless career: A new employment principle for a new organisational era*, Oxford, Oxford University Press, 1996.

Atkinson, J., *Flexibility, uncertainty and manpower management*, IMS Report No. 89, Brighton, Institute of Manpower Studies, 1984.

Atkinson, J. and Meager, N., *Changing working patterns: How companies achieve flexibility to meet new needs*, London, Institute of Manpower Studies, National Economic Development Office, 1986.

Aulakh, P.S., Kotabe, M. and Sahay, A., 'Trust and performance in cross-border marketing partnerships: A behavioural approach', *Journal of International Business Studies*, Vol. 27(5), 1996, pp. 981–1004.

Baron, J. and Kreps, D., *Strategic human resources: Frameworks for general managers*, New York, Wiley, 1999.

Blanc-Brude, F. et al, *Public-private partnerships in Europe: An update*, Luxembourg, European Investment Bank, 2007.

Brandão Moniz, A. and Kovács, I., *Conditions of interfirm co-operation in a virtual enterprise concept: The case of the automotive sector in Portugal*, Munich Personal RePEc Archive, MPRA Paper 5658, 2000.

Cascio, W.F. and Serapio, M.G., 'Human resources systems in an international alliance: The undoing of a done deal?', *Organizational Dynamics*, Vol. 19, 1991.

Danis, W.M., 'Differences in values, practices, and systems among Hungarian managers and western expatriates: An organizing framework and typology', *Journal of World Business*, Vol. 38(3), 2003, pp. 224–244.

Doellgast, V. and Greer, I., 'Vertical disintegration and the disorganization of German industrial relations', *British Journal of Industrial Relations*, Vol. 45(1), 2007, pp. 55–76.

Doellgast, V., Nohara, H. and Tchobanian, R., 'Institutional change and the restructuring of service work in the French and German telecommunications industries', *European Journal of Industrial Relations*, Vol. 15(4), 2009, pp. 373–394.

Donker, J.C. and Poshuma de Boer, U., *Virtual and extended enterprise networks in European aeronautics*, National Aerospace Laboratory NLR, 2001.

European Commission, *Final report of the expert group on enterprise clusters and networks*, Brussels, European Commission, Enterprise Directorate-General, 2002.

European Commission, *Resource book on PPP case studies*, Brussels, European Commission, Directorate-General Regional Policy, 2004.

European Commission, *Working together for growth and jobs: A new start for the Lisbon strategy*, Communication to the spring European Council, COM(2005) 24 final, Brussels, 2005.

European Commission, *Industrial relations in Europe 2008*, Brussels, European Commission, Directorate-General for Employment, Social Affairs and Equal Opportunities, 2008.

Fedor, K.J. and Werther, W.B., 'The fourth dimension: Creating cultural responsive international alliances', *Organisational Dynamics*, Autumn 1996, pp. 39–52.

Felstead, A., *The corporate paradox: Power and control in the business franchise*, London, Routledge, 1993.

Fisher, S.L., Wasserman, M.E., Wolf, P.P. and Wears, K.H., 'Human resource issues in outsourcing: Integrating research and practice', *Human Resource Management*, Vol. 47(3), 2008, pp. 501–523.

Garavan, T.N., Wilson, J.P., Cross, C., Carbery, R. et al, 'Mapping the context of training, development and HRD in European call centres: A complex interplay of environmental, organisational, work and skill influences', *Journal of European Industrial Training*, Vol. 32(8/9), 2008, pp. 616–728.

Granovetter, M.S., 'Economic action and social structure: The problem of embeddedness', *American Journal of Sociology*, Vol. 91(3), 1985, pp. 481–510.

Grimshaw, D., Cooke, F.-L., Grugulis, I. and Vincent, S., *New technology, work and employment*, Vol. 17(3), November 2002, pp. 186–203.

Grimshaw, D., Marchington, M. and Rubery, J., 'The blurring of organisational boundaries and the fragmentation of work', in Wood, G. and James, P. (eds.), *Institutions, production and working life*, Oxford, Oxford University Press, 2006.

Grimshaw, D. and Miozzo, M., 'New human resource management practices in knowledge-intensive service firms: The case of outsourcing and staff transfer', *Human Relations*, Vol. 62(10), 2009, pp. 1521–1550.

Grimshaw D. and Roper, I., 'Partnership: Transforming the employment relationship in public service delivery', in Dibben, P., James, P., Roper, I. and Wood, G. (eds.), *Modernising work in public services: Redefining roles and relationships in Britain's changing workplace*, Basingstoke, Palgrave, 2007.

Grimshaw, D., Rubery, J. and Almond, P., 'Multinational companies and the host country environment', in Harzing, A.-W. and Pinnington, A. (eds.), *International Human Resource Management*, 3rd edition, London, Sage, 2011.

Grimshaw, D., Rubery, J. and Marchington, M., 'Managing people across hospital networks in the UK: Multiple employers and the shaping of HRM', *Human Resource Management Journal*, Vol. 20(4), 2010, pp. 407–423.

Hall, D., *Public-Private Partnerships: Summary paper*, Prepared for the Public Services International Research Unit (PSIRU), London, University of Greenwich, October, 2008.

Harry, W. and Banai, M., *International itinerants*, in Morley, M. (ed.), International Human Resource Management and International Assignments, Basingstoke, Palgrave MacMillan, 2005.

Hardy, S. and Adnett, N., 'Entrepreneurial freedom versus employment rights: The acquired rights directive and EU social policy post-Amsterdam', *Journal of European Social Policy*, Vol. 9(2), 1999, pp. 127–137.

Hebson, G., Grimshaw, D. and Marchington, M.P., 'PPPs and the changing public sector ethos: Case-study evidence from the health and local authority sectors', *Work, Employment and Society*, Vol. 17(3), 2003.

Hitt, M.A., Li, H. and Worthington, W.J., 'Emerging markets as learning laboratories: Learning behaviours of local firms and foreign entrants in different institutional contexts', *Management and Organization Review*, Vol. 1(3), 2005, pp. 353–380.

IFSL Research, *PFI in the UK and PPP in Europe 2009*, London, International Financial Services London/ TheCityUK/UK Trade and Investment, 2009.

Iles, P. and Yolles, M., 'International joint ventures, HRM and viable knowledge migration', *International Journal of Human Resource Management*, Vol. 13(4), 2002, pp. 624–641.

Johnson, J.L., Cullen, J.B., Sakano, T. and Takenouchi, H., 'Setting the stage for trust and strategic integration in Japanese–US co-operative alliances', *Journal of International Business Studies*, Vol. 27 (5), 1996, pp. 981–1004.

Kabst, R., 'Human resource management for international joint ventures: Expatriation and selective control', *International Journal of Human Resource Management*, Vol. 15(1), 2004, pp. 1–16.

Keune, M., Leschke, J. and Watt, A., *Privatisation and liberalisation of public services in Europe: An analysis of economic and labour market impacts*, Brussels, European Trade Union Institute, 2008.

Koeszegi, S., 'Trust-building strategies in inter-organizational negotiations', *Journal of Managerial Psychology*, Vol. 19(6), 2004, pp. 640–660.

Kyj, M.J. and Kyj, L., 'An institution-stakeholder framework for examining business relationship dynamics in a transforming Eastern Europe', *Journal of World Business*, Vol. 44(3), 2009, pp. 300–310.

Lam, A., 'Knowledge networks and careers: Academic scientists in industry-university links', *Journal of Management Studies*, Vol, 44(6), 2007, pp. 993–1016.

Lane, C. and Bachmann, R., 'Co-operation in interfirm relations in Britain and Germany: The role of social institutions', *The British Journal of Sociology*, Vol. 48(2), 1997, pp. 226–254.

Lattemann, C., Stieglitz, S., Kupke, S. and Schneider, A., 'Impact of PPPs to broadband diffusion in Europe', *Transforming government: People, process and policy*, Vol. 3(4), 2009, pp. 355–374.

Lee, H., 'The role of competence-based trust and organizational identification in continuous improvement', *Journal of Managerial Psychology*, Vol. 19(6), 2004.

Maloni, M.J. and Benton, W.C., 'Supply chain partnerships: opportunities for operational research', *European Journal of Operational Research*, Vol. 101(3), 1997, pp. 419–429.

Marchington, M.P., Carroll, M., Grimshaw, D., Pass, S. and Rubery, J., *Managing people in networked organisations*, London, Chartered Institute of Personnel and Development, 2009.

Marchington, M.P., Grimshaw, D., Rubery, J. and Willmott, H. (eds.), *Fragmenting work: Blurring organizational boundaries and disordering hierarchies*, Oxford, Oxford University Press, 2005.

Marchington, M.P., Rubery, J. and Grimshaw, D., 'Alignment, integration and consistency in HRM across multi-employer networks', *Human Resource Management*, Vol. 50, 2011 (forthcoming).

Möllering, G., Bachmann, R. and Lee, S.H., 'Understanding organizational trust: Foundations, constellations, and issues of operationalisation', *Journal of Managerial Psychology*, Vol. 19(6), 2004, pp. 556–570.

OECD, *Managing working conditions in the supply chain – A fact-finding study of corporate practices*, Roundtable on corporate responsibility: Supply chains and the OECD guidelines for multinational enterprises, Paris, OECD, 19 June 2002.

OPSR, *Reforming our public services: Principles into practice*, London, Office for Public Services Reform/TSO, 2002.

Parkhe, A., 'Strategic alliance structuring: A game theoretic and transaction cost examination of interfirm cooperation', *Academy of Management Journal*, Vol. 36(4), 1993, pp. 794–829.

Pucik, V., 'Strategic alliances, organizational learning, and competitive advantage: The HRM agenda', *Human Resource Management*, Vol. 27(1), 1988, pp. 77–93.

Ring, P.S. and Van de Ven, A.H., 'Structuring cooperative relationships between organisations', *Strategic Management Journal*, Vol. 13, 1992, pp. 483–498.

Rubery, J., 'Employment policy and practice: Crossing borders and disordering hierarchies', in Marchington, M.P., Grimshaw, D., Rubery, J. and Willmott, H. (eds.), *Fragmenting work: Blurring organizational boundaries and disordering hierarchies*, Oxford, Oxford University Press, 2005.

Rubery, J., Cooke, F., Marchington, M.P. and Earnshaw, J., 'Inter-organizational relations and employment in a multi-employer environment', *British Journal of Industrial Relations*, Vol. 41(2), 2003, pp. 265–289.

Rubery, J., Earnshaw, J., Marchington, M.P., Cooke, F. and Vincent, S., 'Changing organizational forms and the employment relationship', *Journal of Management Studies*, Vol. 39(5), 2002.

Rubery, J., Grimshaw, D. and Marchington, M.P., *Blurring boundaries and disordering hierarchies: Challenges for employment and skills in networked organisations*, Report for the UK Commission for Employment and Skills, June 2010.

Sako, M., *Prices, quality and trust: interfirm relations in Britain and Japan*, Cambridge, Cambridge University Press, 1992.

Schuler, R.S. and Jackson, S.E., *Human resource issues and activities in international joint ventures*, School of Management and Labor Relations, New Jersey, Rutgers University, 2004.

Schuler, R.S. and Tarique, I., 'International joint venture system complexity and human resource management', in Björkman, I. and Stahl, G. (eds.), *Handbook of research in IHRM*, London, Edward Elgar Publishing, 2005.

Schuler, R.S., Tarique, I. and Jackson, S.E., 'Managing human resources in cross-border alliances', *Advances in Mergers and Acquisitions*, Vol. 3, 2004, pp. 103–129.

Sinclair, D., Hunter, L. and Beaumont, P., 'Models of customer-supplier relations', *Journal of General Management*, Vol. 22(2), 1996, pp. 56–75.

Sturgeon, T.J., *Modular production networks: A new American model of industrial organization*, MIT Working Paper IPC-02-003, Cambridge MA, 2002.

Todeva, E. and Knoke, D., 'Strategic alliances and models of collaboration', *Management Decision*, Vol. 43(1), 2005, pp. 123–148.

Traxler, F. and Brandl, B., 'Towards Europeanization of wage policy: Germany and the Nordic countries', *European Union Politics*, Vol. 10(2), 2009, pp. 177–201.

Traxler, F., Brandl, B., Glassner, V. and Ludvig, A., 'Can cross-border bargaining coordination work? Analytical reflections and evidence from the metal industry in Germany and Austria', *European Journal of Industrial Relations*, Vol. 14(2), 2008, pp. 217–237.

Traxler, F. and Mermet, E., 'Coordination of collective bargaining: The case of Europe', *European Review of Labour and Research*, Vol. 9(2), Summer 2003, pp. 229–246.

UNIDO, *Development of clusters and networks of SMEs*, Vienna, United Nations Industrial Development Organization, 2001.

Uzzi, B., 'The sources and consequences of embeddedness for the economic performance of organizations: The network effect', *American Sociological Review*, Vol. 61, 1996.

Williams, P., 'The competent boundary spanner', *Public Administration*, Vol. 80(1), 2002, pp. 103–124.

European Foundation for the Improvement of Living and Working Conditions

Impact of interfirm relationships – employment and working conditions

Luxembourg: Publications Office of the European Union

2011 – VIII, 70 p. – 21 x 29.7 cm

doi: 10.2806/1337
ISBN 978-92-897-0884-5

SALES AND SUBSCRIPTIONS

Publications for sale produced by the Publications Office of the European Union are available from our sales agents throughout the world.

How do I set about obtaining a publication?

Once you have obtained the list of sales agents, contact the sales agent of your choice and place your order.

How do I obtain the list of sales agents?

- Go to the Publications Office website: http://www.publications.europa.eu/
- Or apply for a paper copy by fax (352) 2929 42758

EF/11/01/EN

4 5
TJ-79-11-103-EN-C

During recent decades, various new forms of interfirm relationships have been emerging across national contexts. This study seeks to fill a gap in the research carried out to date on the impact of these relationships on working conditions and employment practices, including human resources management policies. This report draws on 20 case studies and a review of literature to investigate the varied effects of five types of interfirm relationships on employment. These are joint ventures, clusters, public-private partnerships, strategic alliances/networks and virtual company networks. In the current economic climate, developing interfirm relationships is linked with company survival and competitiveness.

The European Foundation for the Improvement of Living and Working Conditions (Eurofound) is a tripartite EU body, whose role is to provide key actors in social policymaking with findings, knowledge and advice drawn from comparative research. The Foundation was established in 1975 by Council Regulation EEC No 1365/75 of 26 May 1975.

Publications Office

doi: 10.2806/1337
ISBN 978-92-897-0884-5
9 789289 708845