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Working conditions of contract workers in the oil and gas industries

lan Graham

Sectoral Activities Department

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SECTORAL ACTIVITIES PROGRAMME

Working Paper

Working conditions of contract workers in the oil and gas industries

by

Ian Graham

Working papers are preliminary documents circulated to stimulate discussion and obtain comments

International Labour Office Geneva 2010

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Preface

Oil and gas are essential components of modern, industrialized civilization; as societies and economies grow, so do their oil and gas industries. The oil and gas industries have revolutionized human lives and improved our standard of living. The industries' products constitute building blocks at every level of production and consumption in key sectors of economic life. A stable supply of oil and gas is needed to sustain continued development of our economies. The oil and gas industries are highly capitalized; much of the manual work has been replaced by automation, but significant parts of oil and gas operations still rely on human input. Sound employer–employee relations are therefore crucial to the stable production and supply of oil and gas.

The Sectoral Activities Programme of the International Labour Office held the Tripartite Meeting on Promoting Social Dialogue and Good Industrial Relations from Oil and Gas Exploration and Production to Oil and Gas Distribution in Geneva on 11–14 May 2009. The meeting adopted a set of conclusions that request the Office to carry out followup activities. This study was commissioned in order to fulfil the meeting's conclusions. The aim of this paper is to explore some practices and problem areas for improvement in working conditions and occupational safety and health in the oil and gas industries. The paper was prepared by Ian Graham, independent energy journalist. He is to be congratulated for his work and contribution to the improvement of working conditions in the oil and gas industries. The ILO hopes that this study will provide an opportunity to consider how working conditions and occupational safety and health can be improved, in the interests of both decent work and greater prosperity of the industries.

> Elizabeth Tinoco Director Sectoral Activities Department (SECTOR) International Labour Office

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List of abbreviations

AIF	all injury frequency
API	American Petroleum Institute
APPEA	Australian Petroleum Production and Exploration Association
BBC	British Broadcasting Corporation
CAODC	Canadian Association of Oilwell Drilling Contractors
CIETT	International Confederation of Private Employment Agencies
CONCAWE	Oil Companies' European Organization for Environmental and Health Protection
CSB	United States Chemical Safety Board
Dieese	Inter-Trade Union Department of Statistics and Socio-economic Studies of Brazil
E&P	exploration and production
EIA	Energy Information Administration
EMF	European Metalworkers' Federation
FAR	fatal accident rate
GFA	global framework agreement
HSE	health, safety and environment
IADC	International Association of Drilling Contractors
IARC	International Agency for Research on Cancer
ICEM	International Federation of Chemical, Energy, Mine and General Workers' Unions
IE	Industri Energi Union, Norway
IEA	International Energy Agency
IFA	international framework agreement
IMF	International Metalworkers' Federation
ITF	International Transport Workers' Federation
LO	Norwegian Confederation of Trade Unions
LTIF	lost time injury frequency
LWIF	lost work incident frequency
MUA	Maritime Union of Australia
NAOC	Nigerian Agip Oil Company
NHO	Confederation of Norwegian Business and Industry
NUPENG	National Union of Petroleum and Natural Gas Workers (Nigeria)
OECD	Organisation for Economic Co-operation and Development
OGP	International Association of Oil & Gas Producers
OLF	Norwegian Oil Industry Association

OSHA	Occupational Safety and Health Administration of the United States Department of Labor
OWTU	Oilfields Workers' Trade Union
PENGASSAN	Petroleum and Natural Gas Senior Staff Association of Nigeria
PSA	Petroleum Safety Authority Norway
ROGWU	Russian Oil and Gas Workers' Union
Shell	Royal Dutch Shell plc
SPDC	Shell Petroleum Development Company of Nigeria
TRIR	total recordable injury rates
UKCS	United Kingdom continental shelf

Introduction

Contracting is on the increase. Across all industries and services sectors, the use of contract and agency labour has soared. In 2007, over 95 million agency workers (in full-time equivalents) were employed worldwide. That was more than twice the figure for 1997. The turnover of the world's 62,000 private employment agencies reached \notin 234 billion in 2007 – up 3 per cent from the previous year (International Confederation of Private Employment Agencies (CIETT), 2009). At the same time, the outsourcing of tasks to contractor and service companies has grown rapidly.

The oil and gas industries are no exception to these trends. Upstream, contractor firms are at work in exploration, drilling, production, construction, transport and catering. Downstream, they have a big presence in the refineries, which they also help to plan, build, equip and maintain. Individual contract workers, often hired through specialized or general employment agencies, are active throughout the sector.

What types of work do they do? What are the trends and challenges facing them? What are their pay levels, and how are they set? How is their working time organized? Can they reconcile their work with family life? What can be done to promote their safety and health at work? How can social dialogue improve their conditions?

Research on the working conditions of contractors and subcontractors in the oil and gas industries was specifically requested by the Tripartite Meeting on Promoting Social Dialogue and Good Industrial Relations from Oil and Gas Exploration and Production to Oil and Gas Distribution, which was held in Geneva on 11–14 May 2009, in the conclusions adopted by the meeting (ILO, 2009a).

The term "contractor" is imprecise. Its meaning can differ from country to country and from sector to sector. To some extent, this variation reflects the range and complexity of present-day employment relationships. The ILO's constituents have paid considerable attention to that issue in recent years. Those points apply to contract labour in the oil and gas industries, even though the conditions there are not altogether typical. The specifics of this sector are examined throughout the working paper.

The ILO therefore sent out a request for information to the participants, and also to a wider range of companies (including operators and contractors), trade unions and governments. Valuable information was provided by employers' and workers' organizations in Australia, Ecuador, Norway, Russian Federation, and Trinidad and Tobago. The data contributed have been used throughout this paper. The source is indicated each time, together with "2009 ILO survey response". A complete form of the request for information can be found in Appendix I.

To this anecdotal evidence, we have added data from other sources and other countries, where possible. In each case, the source and year are indicated in parentheses, and the details are given in the References at the end of the working paper. However, with the notable exception of health and safety performance figures, companies in the sector and their trade federations do not appear to collect data on differences between conditions for operators and those for contractors. Nor are most national and international statistical services currently able to provide differentiated figures for contractor and operator labour conditions in the sector. An exception is Statistics Canada, which produced a series of twoyear comparative data for permanent and temporary employees in the Canadian oil and gas extraction industries for this working paper. This contribution is gratefully acknowledged.

This working paper should be seen as no more than an initial overview of the subject. Given the shortage of original data, it has been difficult to estimate how far the pay and conditions of contractors in the oil and gas industries differ from those of operating companies worldwide. Original field research on this topic, and/or more systematic collection of data from companies and trade unions, could no doubt be a useful future activity.

For the purposes of this working paper, the term "contractor" is defined as an individual or organization performing work for the operators, following verbal or written agreement, while "subcontractor" is taken to be synonymous with "contractor". The terms "contract worker" and "contract labour" have been used throughout the text. "Casual worker" and "casual labour" are equivalent terms in the oil and gas industries in some parts of the world. In contrast, the term "operator employees" has generally been used to describe those workers who are on an operator's own payroll, and who are also sometimes known as "permanent employees", "company employees" or "staff employees".

If much of this study touches on the employment relationship, it is also highly relevant to another core ILO concern – decent work.

The Decent Work Agenda, promoted by the ILO, has four main components: rights at work; employment and work; social protection; and social dialogue. Clearly, all of these are directly relevant to the situation of contractors in the oil and gas industries. What is more, the four elements are strongly interrelated, as a recent study points out:

Rights at work "affect all aspects of work. For instance, rights to a minimum wage and a healthy working environment affect the form and volume of employment. The right to freedom of association and collective bargaining has consequences for the degree and pattern of social protection. It also affects the nature and substance of social dialogue."

Employment levels and status "affect social security in obvious ways. High levels of remunerative employment obviate the need for certain types of social security. The content, delivery and financing of social security are influenced by the proportion of the labour force in different work categories. The latter also have an impact on the form of worker and enterprise organization and mode of negotiations. Employment levels and remuneration affect the content of collective bargaining. They also affect the ability of workers to negotiate on a range of issues pertaining to rights at work."

Social protection is an important component of decent work as "the coverage and benefit levels of social security affect employment through their impact on labour supply, investment levels, productivity and worker response to change and innovation. They also influence the bargaining power of workers in social dialogue and their ability to secure other rights at work."

Social dialogue "provides a vehicle for negotiations on rights at work such as social security, minimum wages and conditions of work. Social dialogue also makes it possible to influence the implementation of these rights, as well as to monitor achievement. Collective bargaining has an obvious impact on the structure, level and conditions of employment. It also provides a forum for negotiations on the form and content of social security. Tripartite and broader forms of social dialogue involving governments, enterprises, workers and civil society agencies exercise an influence on all dimensions of decent work through their impact on macro-economic and other key social and economic policies." (Ghai, 2006).

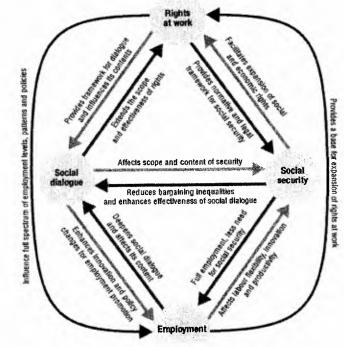
The interrelationship of these four elements is shown in figure A. The importance of the linkage between contract labour and decent work is recognized by some major private employment agencies, which understand the implications for their social acceptability and their balance sheets. In May 2009, for example, the Adcorp Group, which is based in South Africa, announced "solid financial results in challenging times", buoyed by "the strong blue collar bias of its flexible staffing operations and the ongoing skills shortage".

According to the same press release, CEO Richard Pike said that "Adcorp was actively involved in the debate around further regulation governing the contract labour market and supports adherence to the principle of 'decent work' as defined by the International Labour Organization (ILO)" (Adcorp, 2009).

The implications for contract workers are also well understood by trade unions. "Workers everywhere need to be protected by a well-established 'employment relationship'," insists the International Federation of Chemical, Energy, Mine and General Workers' Unions (ICEM). It believes that "more work should be done with the ILO to make sure that legal protections for contract and agency labour workers ... are strengthened ... In particular, there is a need to guarantee the contract and agency labour workers' rights to freedom of association and collective bargaining" (ICEM, 2008a). Tackling precarious work was one of the three priorities set by the International Transport Workers' Federation (ITF) for its participation in the World Day for Decent Work (ITF, 2008). Meanwhile, the International Metalworkers' Federation (IMF) points to the adoption by the ILO of the Employment Relationship Recommendation, 2006 (No. 198), urging that "We must push all governments to legislate in line with this internationally agreed recommendation to provide workers with greater protections" (IMF/European Metalworkers' Federation (EMF), 2008). And the UNI Global Union is committed to "work with the ILO and other international bodies to ensure that self-employed workers are legally recognized as having the right to representation and collective bargaining" (UNI Global Union, 2007).

Contractors and contract workers in the oil and gas industries are certainly entitled to decent work. This working paper, in drawing together the available information and suggesting some possible further action, is a small step towards that goal.

Figure A. Interdependence between rights at work, employment, social security and social dialogue



Source: Ghai, 2006.

1. Contract labour in the oil and gas sector – An overview

There are many reasons to work in the oil industry:

- excellent money oil industry workers can easily earn over US\$90,000 a year;
- great work rosters offshore workers work in rotations, meaning that you spend much of the year on holiday;
- challenging work if you are tired of the 9–5 routine or want a complete change in career, the oil industry offers a demanding environment to work in, but huge opportunities [for] earnings and also career progression;
- international job opportunities if you want to work abroad there are a large number of these roles available. And employers will cover your transport costs from your hometown, to the rig and back (Oil Industry Jobs, 2009).

To earn US\$90,000 for spending "much of the year on holiday" does sound enticing. But at least this recruitment agency is honest enough to mention "challenging work" and a "demanding environment" as well.

Indeed, the hard work, long hours, dangers and difficult living conditions faced by many oil and gas workers do tend to be well rewarded. Oil production in particular is a high-paying sector. In 2008, crude oil production came in joint second with mining among the world's most profitable industries, with a 14.1 per cent return on assets. Refining came in 11th, with a 5.4 per cent return (Fortune Global 500, 2008).

1.1. The nature of contract work

The oil and gas industries make wide-scale use of contracting. But its realities are particularly complex and do not closely resemble those in other industries. By the same token, the situation of oil and gas contract workers is not typical of contract and agency labour in other parts of the economy.

One factor here is the relationship between the oil and gas companies themselves. Some firms in the sector are concerned solely with exploration and production (E&P), others with refining and distribution, while still others integrate the whole process from the oil or gas field to the end consumer. There are also firms that are purely contractors and they provide specialized services to the operators. These can range from construction, exploration drilling, well logging (analyzing and recording the properties of the formations penetrated by drill holes), shaft-sinking and laboratory analysis to maintenance, transport, catering and security. A further complication is that E&P operators can, at times, also function as contractors. One operator may contract to provide services to another.

So, the term "contract worker" can in fact cover a wide range of employment relationships in the sector. It includes short-term workers with a direct contract, part-time workers with a direct contract, workers on a short-term commercial contract (whether fulltime or part-time), agency workers, day labourers, informal workers, and workers in any employment relationship with a contractor or subcontractor to an oil or gas company, including those providing services to one company on behalf of another.

Box 1.1 shows the job descriptions for some categories of worker often hired on a contract or consultant basis, together with current United States employment rates and likely future United States demand for these categories (for the corresponding median pay rates, see box 2.2) The descriptions of the tasks are American too, and may vary to some degree from those applying elsewhere. However, in a sector that recruits globally, job titles

are tending to standardize on the American model. Box 1.2 explains the composition of the rig crews used by Canadian drilling contractors.

	Box 1.1 s in the oil and gas industries, United States: Employment 2006, cted hiring need up to 2016, and job descriptions
Derrick operators, oil and gas	
Rig derrick equipment and	operate pumps to circulate mud through drill hole.
Employment (2006)	19,000
Projected need (2006–16)	2,000 additional
Tasks	
 Inspect derricks, or order the 	eir inspection, prior to being raised or lowered.
 Inspect derricks for flaws, a 	nd clean and oil derricks in order to maintain proper working conditions.
 Control the viscosity and w 	eight of the drilling fluid.
 Repair pumps, mud tanks, 	and related equipment.
Set and bolt crown blocks t	o posts at tops of derricks.
 Listen to mud pumps and pumps and drilling mud sys 	check regularly for vibration and other problems, in order to ensure that rig tems are working properly.
 Start pumps that circulate r 	nud through drill pipes and boreholes to cool drill bits and flush out drill-cuttings
 Position and align derrick e 	lements, using harnesses and platform-climbing devices.
 Supervise crew members, a 	and provide assistance in training them.
 Guide lengths of pipe into a 	and out of elevators.
Gas plant operators	
Distribute or process gas for pressures on main pipelines.	or utility companies and others by controlling compressors to maintain specified
Employment (2006)	12,000
Projected need (2006–16)	3,000 additional
Tasks	
 Monitor transportation and safety guidelines are follow 	storage of flammable and other potentially dangerous products to ensure tha ed.
	ning, observe temperature, level, and flow gauges, and perform regular uni that all equipment is operating as it should.
 Control operation of compress, or re-gasify nature 	essors, scrubbers, evaporators, and refrigeration equipment in order to liquefy iral gas.
Start and shut down plant e	equipment.
 Record, review, and comp pressures, concentrations, 	ile operations records, test results, and gauge readings such as temperatures and flows.
 Adjust temperature, press required levels or to correc 	ure, vacuum, level, flow rate, and/or transfer of gas to maintain processes a t problems.
 Clean, maintain, and repain performed. 	r equipment, using hand tools, or request that repair and maintenance work be
 Collaborate with other open 	ators to solve unit problems.
 Determine causes of abn installation of pipes to relie 	ormal pressure variances, and make corrective recommendations, such as ve overloading.
 Read logsheets to determine 	ne product demand and disposition, or to detect malfunctions.

Petroleum engineers

Devise methods to improve oil and gas well production and determine the need for new or modified tool designs. Oversee drilling and offer technical advice to achieve economical and satisfactory progress.

Employment (2006) 17,000

Projected need (2006–16) 5,000 additional

Tasks

- Assess costs and estimate the production capabilities and economic value of oil and gas wells, in order to
 evaluate the economic viability of potential drilling sites.
- Monitor production rates, and plan rework processes to improve production.
- Analyse data to recommend placement of wells and supplementary processes to enhance production.
- Specify and supervise well modification and stimulation programmes to maximize oil and gas recovery.
- Direct and monitor the completion and evaluation of wells, well testing, or well surveys.
- Assist engineering and other personnel to solve operating problems.
- Develop plans for oil and gas field drilling, and for product recovery and treatment.
- Maintain records of drilling and production operations.
- Confer with scientific, engineering, and technical personnel to resolve design, research, and testing problems.
- Write technical reports for engineering and management personnel.

Petroleum pump system operators, refinery operators, and gaugers

Control the operation of petroleum refining or processing units. May specialize in controlling manifold and pumping systems, gauging or testing oil in storage tanks, or regulating the flow of oil into pipelines.

Employment (2006) 42,000

Projected need (2006–16) 12,000 additional

Tasks

- Monitor process indicators, instruments, gauges, and meters in order to detect and report any possible problems.
- Start pumps and open values or use automated equipment to regulate the flow of oil in pipelines and into and out of tanks.
- Control or operate manifold and pumping systems to circulate liquids through a petroleum refinery.
- Operate control panels to coordinate and regulate process variables such as temperature and pressure, and to direct product flow rate, according to process schedules.
- Signal other workers by telephone or radio to operate pumps, open and close valves, and check temperatures.
- Verify that incoming and outgoing products are moving through the correct meters, and that meters are working properly.
- Read automatic gauges at specified intervals to determine the flow rate of oil into or from tanks, and the
 amount of oil in tanks.
- Operate auxiliary equipment and control multiple processing units during distilling or treating operations, moving controls that regulate valves, pumps, compressors, and auxiliary equipment.
- Plan movement of products through lines to processing, storage, and shipping units, utilizing knowledge of system interconnections and capacities.
- Read and analyse specifications, schedules, logs, test results, and laboratory recommendations in order to
 determine how to set equipment controls to produce the required qualities and quantities of products.

Rotary drill operators, oil and gas

Set up or operate a variety of drills to remove petroleum products from the earth and to find and remove core samples for testing during oil and gas exploration.

Employment (2006) 20,000

Projected need (2006–16)

0,000

, ,

2,000 additional

Tasks

- Train crews, and introduce procedures to make drill work more safe and effective.
- Observe pressure gauges and move throttles and levers in order to control the speed of rotary tables, and to regulate pressure of tools at bottoms of boreholes.
- Count sections of drill rod in order to determine depths of boreholes.
- Push levers and brake pedals in order to control gasoline, diesel, electric, or steam draw works that lower and raise drill pipes and casings in and out of wells.
- Connect sections of drill pipe, using hand tools and powered wrenches and tongs.
- Maintain records of footage drilled, location and nature of strata penetrated, materials and tools used, services rendered, and time required.
- Maintain and adjust machinery in order to ensure proper performance.
- Start and examine operation of slush pumps in order to ensure circulation and consistency of drilling fluid or mud in well.
- Locate and recover lost or broken bits, casings, and drill pipes from wells, using special tools.
- Weigh clay, and mix with water and chemicals to make drilling mud.

Roustabouts

Assemble or repair oil field equipment using hand and power tools. Perform other tasks as needed.

Employment (2006)	44,000
Projected need (2006-16)	13,000 additional

Tasks

- Clean up spilled oil by bailing it into barrels.
- Unscrew or tighten pipes, casing, tubing, and pump rods, using hand and power wrenches and tongs.
- Bolt together pump and engine parts.
- Walk flow lines to locate leaks, using electronic detectors and making visual inspections.
- Move pipes to and from trucks, using truck winches and motorized lifts, or by hand.
- Dismantle and repair oil field machinery, boilers, and steam engine parts, using hand tools and power tools.
- Dig drainage ditches around wells and storage tanks.
- Keep pipe deck and main deck areas clean and tidy.
- Guide cranes to move loads about decks.
- Supply equipment to rig floors as requested, and provide assistance to roughnecks.

Service unit operators

Operate equipment to increase oil flow from producing wells or to remove stuck pipes, casing, tools, or other obstructions from drilling wells.

Employment (2006)

28,000

Projected need (2006–16)

3,000 additional

Tasks

- Observe load variations on strain gauges, mud pumps, and motor pressure indicators, and listen to
 engines, rotary chains, and other equipment in order to detect faulty operations or unusual well conditions.
- Confer with other personnel in order to gather information regarding pipe and tool sizes, and borehole conditions in wells.
- Drive truck-mounted units to well sites.
- Install pressure-control devices onto wellheads.
- Thread cables through pulleys in derricks and connect hydraulic lines, using hand tools.
- Start pumps that circulate water, oil, or other fluids through wells, in order to remove sand and other materials obstructing the free flow of oil.
- Close and seal wells no longer in use.
- Operate controls that raise derricks and level rigs.
- Direct drilling crews performing activities such as assembling and connecting pipe, applying weights to drill
 pipes, and drilling around lodged obstacles.
- Perforate well casings or sidewalls of boreholes with explosive charges.

Wellhead pumpers

Operate power pumps and auxiliary equipment to produce flow of oil or gas from wells in oilfield.

Employment (2006)	14,000
Projected need (2006-16)	2,000 additional

Tasks

- Monitor control panels during pumping operations in order to ensure that materials are being pumped at the correct pressure, density, rate, and concentration.
- Operate engines and pumps in order to shut off wells according to production schedules, and to switch flow of oil into storage tanks.
- Perform routine maintenance on vehicles and equipment.
- Repair gas and oil meters and gauges.
- Unload and assemble pipes and pumping equipment, using hand tools.
- Attach pumps and hoses to wellheads.
- Start compressor engines, and divert oil from storage tanks into compressor units and auxiliary equipment in order to recover natural gas from oil.
- Open valves to return compressed gas to bottoms of specified wells in order to re-pressurize them and force oil to surface.
- Supervise oil pumpers and other workers engaged in producing oil from wells.
- Drive trucks in order to transport high-pressure pumping equipment, and chemicals, fluids, or gases to be pumped into wells.

Source: O*NET OnLine.

Box 1.2 Rig crews for drilling contractors, Canada

Rig crews work in shifts 24/7 and are responsible for the safe, efficient operation of the drilling equipment. A drilling crew has between four and six individuals. Typically, three to four drilling crews are assigned to a rig.

A rig crew has the following positions:

The rig manager is the senior supervisor on site and is in complete charge of the rig. He is responsible for the rig crews, the equipment and the overall operation. The rig manager's direction and leadership keeps the operation running smoothly.

The driller monitors and records the progress of the drilling operation and communicates this to the rig manager and the well site supervisor. He is also responsible for developing a well-trained, reliable and safety-conscious crew.

The derrickhand assists the driller with equipment maintenance and looks after the pumps and mud system. When required, the derrickhand will climb the derrick (about 25 metres above the rig floor), where he is positioned to guide the pipe into the derrick structure.

The motorhand looks after the engines and other machinery. He works on the rig floor with the floorhands and is involved in the training and supervision of junior crewmembers.

The floorhand handles the drill pipe on the rig floor. Some rigs will have two floorhands. A floorhand's responsibilities also include equipment maintenance, mixing mud and chemicals, and assisting other crewmembers.

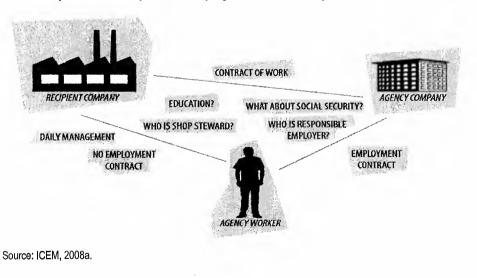
The leasehand performs general labour and maintenance tasks around the rig site, such as helping to dig drainage ditches and to grease equipment. Some rig crews do not have leasehands. On these crews, the entry-level position is the floorhand.

Other people will be on site and involved in the drilling operation, but these people are not employed by the drilling contractor.

Source: Canadian Association of Oilwell Drilling Contractors (CAODC), 2009.

With the exception of day labourers and informal workers, who do exist in some areas of the sector but are generally not typical of it, most oil and gas contract workers are in what is known as triangular employment relationships. These occur when employees of an enterprise ("the provider") perform work for a third party (the "user enterprise") to whom their employer provides labour or services. Such situations can be beneficial to all concerned, but in certain circumstances they can result in a lack of protection for workers. For the employee – who is a contract or agency worker – three key questions arise: Who is my employer? What are my rights? Who is responsible for ensuring them? Relations with trade unions can also become complicated. For example, these employees may be unsure about which union representative, if any, is "responsible" for them. Figure 1.1 shows how this type of employment relationship can look.

Figure 1.1. One example of the complicated employment relationship



1.2. Recent employment trends

Global employment data for oil and gas exploration and production "do not exist and even national employment data are difficult to obtain" (ILO, 2009b). Analysis of the available national data suggests that, in all, some 3 million people are currently employed in the extraction of crude oil and natural gas worldwide. Global employment increased from about 3 million in 2000 to a peak of over 4 million in 2004, then gradually declined. Nearly 1.5 million people are estimated to be employed in oil refining worldwide.

Attempting a global estimate of contract labour levels within the industry is even more problematic. In the United Kingdom extraction and refining sectors, temporary workers made up, respectively, 13.3 per cent and 14.3 per cent of the workforce in 2003 (Oil & Gas UK, 2007). Projected onto the global estimates referred to for the sector as a whole, those percentages would suggest a worldwide temporary workforce of some 400,000 in extraction and some 215,000 in refining. But this is likely to underestimate the situation. There is a clear need for more systematic data-gathering in this field.

Table 1.1 shows Canadian data for the oil and gas extraction industries, distinguishing between permanent and temporary workers. It should be borne in mind that the "temporary employees" category does not include everyone working for the contractor side of the industries. A worker permanently employed by a contractor company will be counted under "permanent employees".

	Total employees	Permanent employees	Temporary employees
1998–99	48 000	44 500	3 500
1999–2000	44 000	40 800	3 2 00
2000–01	49 600	45 600	4 000
2001–02	56 200	51 100	5 100
2002–03	57 400	51 500	5 900
2003–04	58 400	52 600	5 800
2004– 05	62 600	57 600	5 000
2005–06	71 500	66 600	4 900
2006–07	78 500	73 300	5 200
2007–08	81 400	75 700	5 700

Table 1.1.	Employment in the oil and gas extraction industries in Canada (two-year averages),
	1998–2008

One problem is how broadly to define "contracting and subcontracting". Like any major industry, the oil and gas industries have substantial knock-on effects throughout the economy. For example, when Royal Dutch Shell Plc (Shell) says it has "approximately 102,000 staff, but more than four times as many people work for us as contractors or suppliers", it may well be including some employment impacts outside the sector as such (Shell, 2009a).

Some useful indications can be gleaned from the contractors' own employment figures. Table 1.2 shows how many people are employed worldwide, and how many nationalities or in how many countries, by some significant contractor and service companies in the oil and gas industries; however here too the figures should be treated with caution. While the companies selected are active in upstream and/or downstream oil and gas industries, some can and do become involved in other sectors. In particular, those engaged in the manufacture, assembly and dismantling of installations may diversify into

other types of industrial and civil engineering. It follows that their workforces are not always exclusively employed on oil and gas projects. Also, not all of the contractors' employees are frontline industrial workers. While the sector does call upon many smallscale contractors and family businesses, for transport and catering for example, some of the most significant contractors are themselves large-scale enterprises with their own complement of administrative and ancillary staff. A further complication is that the contractors themselves may have two types of worker: the employees on their own payrolls, and the contract workers they hire as and when they need to.

The case of Aker Solutions illustrates the difficulties involved in arriving at a realistic figure. Table 1.2 shows that the company employs some 26,000 people; however, at 31 December 2007, it had a total workforce of 32,717. This was composed of 24,427 direct employees and 8,290 on contract. Moreover, only 37 per cent of the employees were frontline skilled workers or operators. The other 63 per cent were administrative staff. Of the company's own personnel, 47.3 per cent were working in Norway, 12.9 per cent in other parts of Europe, 27.2 per cent in the Americas, 12 per cent in Asia and 0.6 per cent in Africa and the Middle East. Its workforce turnover in 2007 averaged 10.4 per cent. And while Aker Solutions is a major engineering and construction contractor to the oil and gas industries, both upstream and downstream, it also provides similar services to the chemical, mining, metal, and power generation industries (Aker Solutions, 2008).

Chiyoda estimates that, on average, about half of its 6,300 workforce at any time will be contract workers (information communicated).

Company	Activities	Country of origin	Number of employees (approx.)	Countries/ nationalities (approx.)
Aker Solutions	Engineering, construction, technology products, integrated solutions	Norway	26 000	30
Baker Hughes	Oil-field services	United States	39 800	90
BJ Services Cementing, stimulation, coiled tubing, completion, pipeline commissioning and inspection		United States	18 000	n.a.
Chiyoda	Integrated contractor	Japan	6 300	30
Halliburton	Oil-field services	United States	57 000	70
JGC	Engineering	Japan	2 069	70
Nabors Industries	Drilling	Bermuda	26 912	Mainly United States and Canada; also Saudi Arabia, Eastem Europe, Russian Federation and China
Saipem	Offshore, onshore and drilling	Italy	30 000	100
Schlumberger	Oil-field services	United States	77 000	140
Technip	Subsea, offshore and onshore	France	22 000	n.a.
Transocean	Offshore drilling	United States	21 000	n.a.
Weatherford	Mechanical solutions, technology applications, services	United States	40 000	100

Table 1.2. Employment in selected oil and gas contractor companies, 2008–09

n.a. = data not available.

Sources: Aker Solutions, 2008; Baker Hughes, 2009; BJ Services, 2009; Chiyoda (information communicated); Halliburton, 2009a; JGC, 2009; Nabors Industries, 2009; Saipem, 2009; Schlumberger, 2009; Technip, 2009; Transocean, 2009; Weatherford, 2009.

In any case, the proportion of contract labour within the workforce is not stable. Flexibility is one of the contractors' biggest selling points, whether they are companies or individuals. It also makes them more prone to cutbacks when there is a downturn. From the operator's side, ConocoPhillips states that "Since we cannot control the prices of the commodity products we sell, controlling operating and overhead costs, within the context of our commitment to safety and environmental stewardship, are high priorities ... In response to the current [2008] depressed market environment, we expect to reduce our work force in 2009, reduce the headcount of contractors, and continue to emphasize cost discipline throughout our operations" (ConocoPhillips, 2009). From the contractors' side, Halliburton makes a similar point: "As our customers award work in this environment of declining commodity prices, pricing competition [among contractors] in the international arena has intensified." It goes on to discuss "our recent and current initiatives", which include "reducing headcount in locations experiencing significant activity declines" (Halliburton, 2009a).

Employment turnover trends among Australian oil and gas workers "have been cyclical connected to the price of a barrel of oil and the offshore activity at the time". In general terms, "we have had close to full employment for both permanent and casual [contract] workers, with shorter periods of low activity and unemployment amongst the casual labour who are first to be stood down in quieter times". While the average length of employment in the Australian industry would be difficult to estimate, "it would be fair to say that there is about 60–70 per cent permanent employment and the rest is made up of casuals [contract workers]". Most have been consistently employed over the period 2000–09. Scafarers employed in the sector, and covered by the classifications of the Maritime Union of Australia (MUA), are Integrated Ratings (a combined classification of Able Seamen and Motormen); Cooks, including Bakers; Caterers; and Crane Operators (who are generally qualified as Integrated Ratings). There are three terms of employment possible for these categories: for an indefinite period of employment, as a permanent employee, in any of the categories; for a specific period of time (these employees are classed as casual workers); or for a specific task, which may be project-related (also classed as casual workers) (MUA, 2009 ILO survey response).

In Ecuador, there is high job rotation among contract workers in the oil and gas industries, but it is accepted that this is the nature of the business. Given the high demand in the industries, contract workers are generally able to remain in employment. A directly employed workforce would, it is suggested, subject operators to uneconomically high costs. While there are no specific figures for the oil and gas industries, some 75 per cent of the overall industrial workforce in Ecuador is contract labour (National Federation of Chambers of Industry of Ecuador, 2009 ILO survey response).

In the Norwegian oil and gas industries, "to our knowledge, the employment turnover is relatively low for company employees and our impression is that the turnover for contract workers is also relatively low". The mix of company employees and contract workers "seems to be stable and has been so over time" (Norwegian Oil Industry Association (OLF), 2009 ILO survey response). Approximately 75 per cent of the Norwegian workers in the oil and gas industries are employed in contractor and subcontractor companies. Around 10 per cent of these workers are women. "The trend has been that the operators leave more of the non-core business to contractors and subcontractors." A contract "may be for one single task or last up to five years with the option of renewal" (Petroleum Safety Authority Norway (PSA), 2009 ILO survey response).

In the Russian Federation, all workers in the oil and gas industries are on contracts, in line with Russian employment law. There is currently a tendency for servicing subsidiaries to split off from the main operating companies and to become independent operators. This is having an adverse effect on overall employment in the sector (Russian Oil, Gas and Construction Workers' Union (ROGWU), 2009 ILO survey response).

The majority of contract workers in Trinidad and Tobago's oil and gas industries are employed in construction. There is little or no employment turnover. Workers in the oil and gas industries, whether company employees or contract workers, tend to spend their entire working life in the same job. This is particularly the case for contract workers. As a result of outsourcing, most of the semi-skilled positions in the oil and gas industries are now filled by contract workers. Fewer permanent workers are therefore being appointed to these positions. The use of contract labour has been increasing consistently. There have been efforts by the local oil company to formalize the use of contract labour by including it in the collective agreement, but the Oilfields Workers' Trade Union (OWTU) is opposing this move (OWTU, 2009 ILO survey response).

Seasonality is another reason for fluctuations in the use of contractors. Refinery turnarounds are a good case in point. These are planned, periodic shutdowns of all or part of a refinery for maintenance and inspection, plus the repair of equipment and replacement of process materials where necessary. In continuous operations such as refining, turnarounds are also often the only opportunities to improve equipment or processes.

In 2007, a United States Senate committee asked the Energy Information Administration (EIA) to look into the impact of refinery turnarounds on the price of oil and gasoline. Along the way, the EIA gathered some telling facts about seasonal contracting. Turnarounds, it noted, "occur most frequently in the first quarter and the fall"; logically enough, as those are the times of year when demand for oil and petroleum products is lowest in the United States. But within those periods, "other factors affect turnaround and shutdown timing, such as availability of labor, given the very large swings in skilled workers needed for turnarounds". For instance, "holidays and the hunting season are avoided". In fact, "adequate skilled workers are not available to handle simultaneous large turnarounds". This, in turn, means that "contract and engineering firms cannot schedule such activities at the same time". So, to avoid clashes of dates for the different refineries' turnarounds, various sources of information are used. "The contractor and engineering firms themselves are important players. Large turnarounds require enough outside contracting that plans become known even when companies do not announce them."

The refinery turnarounds entail an intensive but seasonal use of contract workers. "A major turnaround on an FCC [fluid catalytic cracker] unit can involve tremendous swings of outside labor into and out of the plant. A 200,000-barrel-per-day refinery might normally have 500 people on staff. During the turnaround, there may be 1,500–2,000 additional people on the refinery site for a month or so, increasing the personnel on site by more than a factor of three." Nonetheless, the work is not quite as seasonal as the refineries might like, for a very good reason: "The need for large labor swings during turnarounds, coupled with the skilled labor shortage, prevents companies from doing much of this work simultaneously" (EIA, 2007).

Worldwide, contract labour for refinery turnarounds has certainly become a seller's market. According to industry data compiled by international consultants Solomon Associates, "the cost of turnarounds has risen by 15 per cent annually from 2000 to 2008, largely as a result of labour cost increases, material cost increases, and scope of work increases during this period. The number of work hours devoted to turnarounds, for example, increased by 10 per cent annually during this period." In other words, not only are the refineries dipping into the same limited pool of contract turnaround labour, they also each need that labour for longer, owing to the increasing complexity of the operations. Naturally, the refiners would like to get out of this bidding war, or at least call a truce from time to time. And, just as naturally, Solomon Associates is offering its services. In September 2009, it announced its Worldwide Refining Turnaround Performance Analysis,

or Turnaround Study, for short. "More than 80 per cent of the world's refining facilities entrust Solomon Associates with their most sensitive operational data," states the company's Executive Vice-President Dave Bossung. Solomon Associates uses the data "as the basis for a proprietary, confidential comparative analysis that helps our study participants to identify and close gaps in their performance". With the Turnaround Study, "we extend this methodology to examine all aspects of the turnaround process, analysing labour expenses, work hours, materials costs, incident rates, lost production for turnaround outages, and more" (Solomon Associates, 2009).

At non-turnaround times, meanwhile, the proportion of contract workers to company employees can vary considerably from one refinery to another, even within the same company and the same country. See, for example, the figures for five British Petroleum (BP) refineries in the United States (box 1.3).

But overall, as in other sectors, the underlying trend throughout the oil and gas industries is towards continued growth in the use of outsourcing, contracting and subcontracting. That goes both for the blue-collar workforce and for the use of consultants in technical, scientific and managerial posts.

Two well-documented recent cases of such growth are in Brazil (box 1.4, together with figure 1.2) and Nigeria (box 1.5, together with table 1.3). They show the strength of this trend, and the reasons behind it, but also the potential for resistance by organized labour. In the case of Brazil's Petrobras, trade union campaigning, plus a changed political context, seems recently to have reversed the process.

Box 1.3 Contractor employment at five United States refineries

Even in the same company and the same country, the proportion of contract workers employed in refineries can vary considerably. This may reflect different production capacities and complexities. The Baker Panel report into safety at BP's refineries in the United States (box 5.3) also gave some figures on contractor employment at the five sites.

Carson: "The refinery has the capacity to process 280,000 barrels of crude oil per day. The Carson business unit includes not only the refinery, but also a cogeneration plant and a calciner ... About 1,100 BP employees and 520 contractors work at the site."

Cherry Point: "A single train refinery, Cherry Point has 12 main processing units. It has a daily processing capacity of 244,000 barrels of crude oil. In addition to refined products, the refinery produces about 2,700 tons per day of anode grade calcined coke. A cogeneration plant is scheduled to begin operation in 2008. The Cherry Point refinery provides jobs for approximately 650 BP employees and 800 contractors."

Texas City: "Considered one of the world's most complex refineries, it includes 29 oil refining units and four chemical units. These refining units produce gasoline, as well as distillate, petrochemical feed, heavy fuel, sulphur, sulphuric acid, petroleum coke, and toluene ... Approximately 1,800 BP employees work at the Texas City refinery ... While Texas City generally employs approximately 2,000 contractors during average operating intervals, the number of contractors working at the site may reach as high as 6,000 during peak turnaround periods."

Toledo: "... a daily processing capacity of 150,000 barrels of crude oil ... The site currently employs approximately 460 BP employees and 200 contractors."

Whiting: "It has a daily processing capacity of 400,000 barrels of crude oil. The Whiting refinery has approximately 1,400 BP employees ... The site also utilizes an average of 1,250 contractors, depending on the level of maintenance and construction activity at the refinery."

Source: Baker, 2007.

Box 1.4 Contract labour in Petrobras – Reversing a trend

"Despite the opposing position taken by the Petrobras workers, the company has been increasing the contract worker contingent year after year." That was the main conclusion of a 2006 report by Dieese, Brazil's Inter-Trade Union Department of Statistics and Socio-economic Studies (Dieese, 2006). "Whereas the number of contract workers in 1995 was approximately 29,000," it stated, "by the end of 2005, this figure had shot up to 143,700 workers."

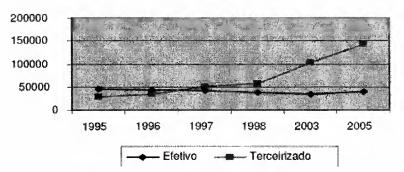
According to the report, "the process of contracting out areas previously considered core (maintenance and operations) coincided with the deregulation of the sector and the adoption of a new organizational model by Petrobras". Legislation approved in 1997 opened up the Brazilian oil sector to private enterprise. According to Dieese, the reorganization inside Petrobras gave managers greater budget autonomy, but also put them on a system of assessment and payment by results. Consequently, "easier solutions, such as contracting out and the precarization of labour relations as a cost reduction strategy, became more tempting".

A previous Dieese report, in 2002, listed areas which it said Petrobras had now contracted out: "catering, laboratory tests, warehousing, well cementing and integrity, project assembly and construction, IT, terrain cleaning, maintenance (terrain, mechanical, heating, welding, electrics, instrumentation, refractories, heat insulation and equipment inspection), load handling, well drilling and profiling, probe operation, medical and administrative services, transport, utilities and security". While conceding that Petrobras itself had cited a range of technical reasons for contracting various activities out, the 2002 report claimed that internal company documents showed "virtually all" these contracts (98 per cent, according to a union graphic) were "defined on the basis of lower price".

The 2006 Dieese report did note that "more recently, the company management has decided to reverse the contracting out processes within its operations". But it added that "there is much to be done in this regard".

To a great extent, that reversal can be put down to trade union campaigning – and to recent political developments in Brazil. "Being a state-owned company, Petrobras, as a primary employer, was relatively easy to engage," ICEM Vice-President Sérgio Novais explains, "particularly with a change of government in Brazil." There are now "better relations between the company and the FUP, the national oilworkers' federation". Over a period of six years, "this has resulted in a reduction of the ratio of contract workers to Petrobras workers from about 4:1 to 2.2:1". But "we're not there yet," he insists. "There are still many, many contract workers on oil rigs" (ICEM, 2009a).

Figure 1.2. Numbers of company employees and contract workers at Petrobras, 1995–2005



Efetivo = Company employees; Terceirizado = Contract workers. Source: Dieese, 2006.

Box 1.5 Body-shopping for workers? Contract labour in Nigeria

Nigeria's oil workers have many ways of describing the contract labour system. "Body Shop" is one of the more printable ones. But, by any other name, it would smell just as bad to their unions the Petroleum and Natural Gas Senior Staff Association of Nigeria (PENGASSAN) and the National Union of Petroleum and Natural Gas Workers (NUPENG). They are campaigning all-out against what they see as exploitation.

When oil and gas production began in Nigeria, the companies were integrated "in terms of structure, staffing and operations," recalls NUPENG General Secretary Elijah Okougbo. "Unfortunately, over the last twenty-five years, an ugly situation started emerging with the contracting out of certain jobs, perceived by these companies not to be directly linked with the core production line." This "cankerworm" has, he says, "eaten deeply into the industrial relations practice in the oil and gas industry."

The Nigerian oil unions allege that:

- contract workers are subjected to "various degrees of exploitation notwithstanding that they possess the requisite qualifications and skills needed to be employed directly on permanent jobs in which some of them have been rendering services as casuals/contract labour for over 20 years in some cases";
- they "are paid pittance wages and have no collective bargaining agreements";
- their employment is increasingly precarious;
- they lack proper on-the-job training;
- they suffer from increased work pressure, unclear responsibilities and inadequate health and safety protection;
- in some cases, "they are made to pay for the insurance provision in the Workmen's Compensation Act instead of being compensated when injured";
- the use of casuals and contract workers has led to low production;
- casual labour has produced "an avalanche of avoidable industrial relations problems in the industry";
- the system has impacted negatively on the oil unions' membership and finances. This has notably happened when management does not recognize the unions as representing contract workers, so making it impossible to use the check-off system for union dues.

The unions have been on the case since the 1990s. At that time, PENGASSAN started organizing the contract staff at the Shell Petroleum Development Company of Nigeria (SPDC) and other E&P firms such as Mobil Producing Nigeria, Elf, and Nigerian Agip Oil Company (NAOC). "Organizing these workers at that time was not very easy as most managements vehemently opposed the move," says PENGASSAN Deputy General Secretary Lumumba Okugbawa. On the other hand, "the contract staff (casuals) were very much willing to join", seeing this as an opportunity "to start enjoying certain basic employment benefits like their counterparts (full-time staff)". And "the beauty of it all was that the permanent employees who were already PENGASSAN members also joined the contract staff in their struggle to become unionized". Organizing successes at SPDC and Mobil Producing Nigeria encouraged PENGASSAN to unionize contract staff across the industry. "Our members under the Contract Staff category now have negotiated or defined terms and conditions of employment expressly stated in their Collective Bargaining Agreement or something similar to it. Though there could be more."

Union-employer relations on the contract labour issue remain tense. But several disputes and tripartite meetings later, NUPENG's Okougbu sums up what he believes to be the principles and instruments now in place:

- all categories of worker in the industry are eligible to be unionized;
- "It was directed that labour contractors be streamlined by the individual oil companies to facilitate the unionization process by NUPENG";
- various oil companies "will on an individual basis address the issue with a view to regularizing the employment of casuals";
- contract staff who meet company recruitment standards "should be given equal opportunity for regular employment when vacancies exist";
- equal remuneration for similar jobs;
- machinery for conflict resolution.

On that basis, the unions have maintained "aggressive unionization of contract workers" across the major oil and service companies in the industry. "Over 60 per cent of labour contract workers have been organized and we are able to negotiate collective bargaining agreements for them." The agreements "may not in any way be comparable to the permanent staff conditions of service but they contain the provisions for minimum labour standards and will continue to improve".

Oil companies' "conversion of labour contracts to service contracts and their fragmentation to very little contract terms" is now the biggest challenge to the unions, Okougbu says. The service contracts have been "reduced to short tenures" as a way of countering unionization drives. He also claims that union leaders identified within the companies are "usually targets of victimization under flimsy excuses during contract renewal processes". But the unions "have accepted the challenge and have organized some service contract workers in NAOC (Nigerian Agip Oil Company), Elf, MPNU (a joint venture between ExxonMobil and the Nigerian National Petroleum Corporation (NNPC)), WRPC (Warri Refining and Petrochemical Company), SPDC, etc. into the union". So far though, it is only at NAOC that "some level of understanding" has been reached about a collective bargaining process.

Organizing "contract staff under Third Party Arrangements/Contractors" is also a challenge for PENGASSAN, Okugbawa confirms. "These contract staff are under a form of triangular employment ... Here, the contract staff cannot easily identify who his employer is. He might have been interviewed for the job by the parent company, e.g. Shell. However, the parent company will thereafter transfer his employment to a contractor, e.g. OTS Nigeria Ltd. It is OTS that will now issue the contract staff his Appointment Letter." He advocates a licensing system for those who recruit contract labour for the industry. Although "not a panacea for all the identified excesses or extremities of contract staffing and casualization", a recruiter's licence "may greatly address these concerns". He also wants the Nigerian Government to bring together all concerned. "We have written various letters to the Ministry of Labour requesting an All Sectors Stakeholders' meeting to review the status of casualization and contract staffing in various sectors," he says. "Unfortunately this has yet to materialize."

The Nigerian oil and gas unions want to move forward on the basis of:

- national law and the core ILO Conventions on labour rights;
- the "immediate conversion of all labour/service contract workers who have requisite qualification and experience, and who have put in 5 years of continuous service, into permanent employment";
- in the interim, operators' ensuring through their pre-qualification and contracting processes that third party
 companies meet minimum labour standards, including clear contractual terms and terminal benefits for
 workers and recognition of their right to be unionized;
- operators' encouraging the formation of a Service Contractors' Forum, similar to the existing one for Labour Contractors, and empowering their suppliers to negotiate collective agreements on the basis of pre-qualification;
- an overhaul of the law on union recognition, with stiffer penalties for non-compliance by employers;
- labour inspections to promote best practices.

The unions plan a series of awareness-raising actions. These will include marking an annual Casualization Day "until a humane collective bargaining agreement is achieved for all categories of workers in the oil and gas industry".

The country's labour movement as a whole was clearly reaching the end of its patience on this issue back in September 2008, when the Nigerian Trade Union Congress (TUC) reportedly urged the Federal Government to "invoke the relevant laws of the country against companies that enslave Nigerians through the practice of casualization and contract staffing". At a meeting with the Minister of Labour and Productivity, Dr. Hassan Lawal, TUC President Peter Esele "observed that under the laws of Nigeria, an oil and gas worker must not stay beyond two years on a casual or contract employment without being made a fully fledged staff". He "wondered why some organizations were still violating the rules". In Nigeria today, he stated, "there are people who have been casuals and contract workers for up to 15 years and they don't have any benefits attached to their contract of employment. No benefits, nothing at the end of the day. That is unacceptable." And he singled the oil and gas sector out for particular criticism: "Esele observed that while the practice of casualization was gradually abating in the banking sector, oil and gas companies have remained adamant despite all previous conferences and dialogues between organized labour and the management of the firms."

Esele is also said to have asked the Minister for "appropriate sanctions against oil and gas companies who violate the expatriate quota rules", remarking that "there were several jobs that should have been left to Nigerians but which Joint Venture partners have continued to ship in foreigners from countries such as the Philippines, Italy and India to take over". It was "ridiculous" and a "huge waste of resources" to "bring in the so-called expatriates to work as cleaners on the oil platforms or bring in artisans to work as engineers in Nigeria when there are so many more qualified and better skilled Nigerians roaming the streets without jobs".

In response, the Minister reportedly "condemned the negative labour practices and urged the companies involved to turn a new leaf as the Federal Government was a hundred per cent against casualization and violation of expatriate quota". He "assured the TUC that all their requests will be conveyed" to the Nigerian President "for necessary actions".

Sources: Okougbo, 2009; Okugbawa, 2009; Ezigbo, 2008.

Type of employment	1999		2000		2001		2002		2003	
	Nigerian	Non- Nigerian								
Regular	28 375	5 578	29 835	5 865	32 175	6 325	33 930	6 670	36 270	7 130
Contract	10 914	485	11 475	510	12 375	550	13 050	580	13 950	620
Subcontract	4 365	_	4 590	_	4 950	_	5 220	-	5 580	-
Subtotal	43 654	6 063	45 900	6 375	49 500	6 875	52 200	7 250	55 800	7 750
Grand total 49 717		52 275		56 375		59 450		63 550		

 Table 1.3.
 Employment of regular and contract workers in the oil sector in Nigeria, 1999–2003

1.3. Future employment prospects

Skills shortages in any industry tend to create more opportunities for contract labour, whether self-employed, agency-employed, or hired by service companies contracting to the main operators. The oil and gas industries are already suffering significant skills shortages, which are likely to grow. This goes both for the operators and for the service companies. The average age of company employees in the industry has increased rapidly.

In the autumn of 2004, the American Petroleum Institute (API) commissioned a survey on "workforce challenges" (API, 2005). This was prompted by four serious concerns:

- A "dramatic decline" in overall employment within the United States petroleum industry since the early 1980s, with "demographic consequences for industry hiring needs". Total employment in the United States petroleum industry "peaked at over 860,000 jobs in 1982, before falling precipitously in the '80s and '90s. Over half a million petroleum jobs were lost between 1982 and 2000. This sharp drop was accomplished by sustained layoffs which gave the industry a reputation of an unreliable employer, and sharply curbed entry into the industry by nearly a full generation."
- A "corresponding drop in undergraduate enrolments in professions particularly essential to the continued advance of petroleum technology, such as petroleum engineering".
- A "decline in the general educational emphasis on areas particularly relevant to technological progress, such as math and science".
- "A growing perception that the petroleum industry is an unattractive industry in which to pursue a professional career, in part because of its past contraction as well as its recent price volatility."

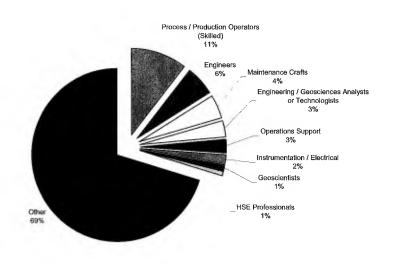
Taking part in the survey were 22 companies, many of which are also significant international players. The respondents were ten independents (Anadarko Petroleum, Apache, Burlington Resources, Devon Energy, EOG Resources, Marathon Ashland Petroleum, Occidental Petroleum, Sunoco, Tesoro Petroleum and Valero Energy); eight integrated companies (Amerada Hcss, BP, Chevron, ConocoPhillips, Marathon Oil, Murphy Oil, Shell Oil and Unocal); and four oil service companies (Baker Hughes, Halliburton, Schlumberger and National Oilwell Varco). The study was designed to assess the likely cumulative effects of the four points listed in the previous paragraph. Its focus was limited to a five-year period, i.e. up to 2009. As the survey was conducted in 2004–05, the economic growth assumptions underlying it may need some revision, but its results are nonetheless significant for employment trends in the industry, and more particularly the role of contractors. Given the global importance of petroleum companies with their headquarters in the United States, the findings are also likely to apply beyond American shores.

The API survey concluded that "the combined effects of demographics and increasing technical skill requirements" are "likely to pose major challenges to both recruiting and managing the workforce over the next five years" (i.e. up to and including 2009). If all of the anticipated needs over that period could be satisfied, "about a third of the key technical positions would turn over in just five years". But "the feasibility of this replacement is problematic, as revealed by a broad concern over shortages in all of the key technical skills".

In particular, the respondents identified eight key skills that were likely to be in short process/production engineers, supply: skilled operators, maintenance crafts, operations engineering/geosciences analysts or technologists, support, instrumentation/electrical technicians, geoscientists, and health, safety and environment (HSE) professionals.

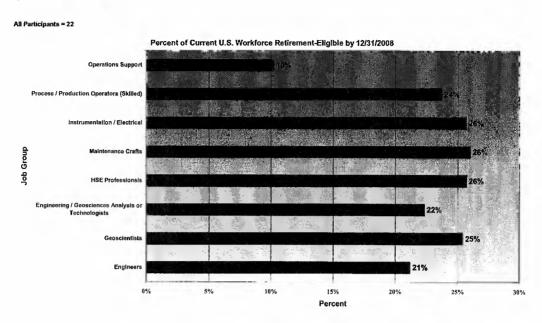
As figure 1.3 shows, these skills accounted for just under one-third of the sample firms' workforce. The proportion of this key technological workforce that would become eligible for retirement by 31 December 2008 (around a quarter in most cases) is indicated in figure 1.4. Sample firms' hiring needs for these categories up to 2009 (more than 22,000 workers for those firms alone) are set out in figure 1.5. The firms' own perceptions of shortages in the external talent pool for those skills are given in figure 1.6 (API, 2005).

Figure 1.3. Key skills likely to be in short supply, as share of sample United States oil firms' workforce



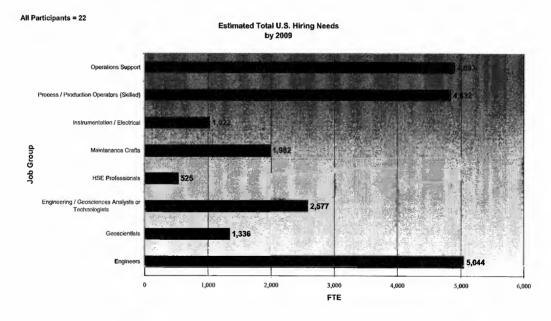
Source: API, 2005. Reproduced courtesy of the American Petroleum Institute, 2009.

Figure 1.4. Share of key United States oil technological workforce retirement-eligible up to 31 December 2008

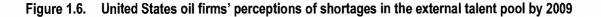


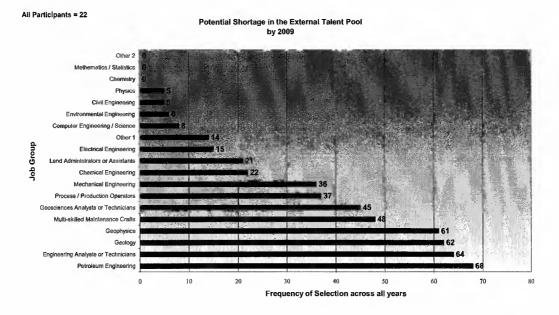
Source: API, 2005. Reproduced courtesy of the American Petroleum Institute, 2009.

Figure 1.5. Key technical skills hiring needs up to 2009, sample United States oil firms



Source: API, 2005. Reproduced courtesy of the American Petroleum Institute, 2009.





Source: API, 2005. Reproduced courtesy of the American Petroleum Institute, 2009.

These predictions suggest that more people with such skills might be hired on a contract basis. Just how many will depend on attitudes both within the operating companies and among qualified contract workers themselves. Some international recruiters for the industry do point to a shift in the operating companies' approach, dating from the mid-2000s onwards. They see a new emphasis on the retention and development of permanent staff as opposed to contract consultancies. But, at the same time, they note reluctance by self-employed technical consultants to become staffers. This is apparently due both to the high pay rates commanded by consultants and to the large number of employment opportunities recently available to them.

On the other hand, some recruiters believe that the large number of contract staff on the payrolls of exploration, production and service companies during the mid-2000s was at least partly due to temporary factors. They argue that a consolidation of service companies during two downturns in the industry within a decade led to the departure of many qualified personnel without compensatory recruitment programmes being put in place. And, as the subsequent upturn was not seen as permanent, many companies still preferred to maintain contract staff rather than recruit new permanent employees.

Contractor companies themselves, meanwhile, have faced acute labour shortages. In early 2008, a top contractor was asked to name the greatest obstacle facing drilling contractors and others. Dennis Smith, Director of Corporate Affairs at Nabors Industries, did not hesitate: "I think the greatest obstacle continues to be people. I think it always has been and always will be the biggest obstacle. Whether you are talking about building rigs – skilled welders, electricians and pipe fitters – or whether you are talking about operations – roughnecks, drillers, rig managers – the higher the skill set required, the tougher it is to attract and retain good people." The situation "is particularly acute internationally, especially technical people who are familiar with the software and new technology …." The globalization of the industry is posing new staffing challenges: "If you have been to the Middle East, you see the infrastructure build-up that is going on over there. It's the same in India, China and Russia. That is the labour pool that we must compete in." So, Nabors Industries is "recruiting in many new venues, such as Eastern Europe, Russia, even China, in addition to our traditional areas". Contractors can also show international flexibility in their deployment of personnel: "With Canada being as slack as it is [in late 2007/early 2008], we can pull some highly experienced and skilled people out of there" (Greenberg, 2008).

Reacting to the skills shortage, the International Association of Drilling Contractors (IADC) launched its Career Connection initiative in 2007. The aim was to "facilitate contacts between our members and prospective employees," explained IADC President Lee Hunt. "IADC won't be acting as an employer representative or conduct any hiring or interviewing. Our goal is to broaden the industry's employment base beyond traditional labour sources." Methods would include research on job markets "with an eye towards areas with high unemployment or where factory closures are imminent", travelling job fairs, career workshops given by drilling contractor recruiters for employees in firms that have announced closures or downsizing, recruitment of military personnel returning from active duty, and "enhancing the European labour force: delegations may be sent to Eastern Europe to access the labour potential there for Western firms" (Hunt, 2007).

This does, of course, assume that the industry's peak councils can collect and analyse sufficient data from the companies to predict future skills needs accurately. That may not always be the case. Implicitly, the Australian Petroleum Production & Exploration Association (APPEA) conceded as much in November 2009 when it welcomed a new workforce development plan by the Government of Western Australia. "Our industry needs highly skilled workers," commented APPEA Western Australia Director Tom Baddeley, "and with the large number of gas projects on the drawing-boards, it is important that we can work together with government to meet these skill needs." However, he added that "establishing reliable, industry wide and sufficiently detailed information on our skills requirements is a key task for our industry, and this is our number one priority at the moment" (APPEA, 2009).

So, are the contractors' recruitment problems all down to workers' preference for other industries? Nabors Industries' Dennis Smith does not believe that that is still the case: "Wages have come up a lot in our industry. In our US Lower 48 operations, we are paying entry-level roughnecks over \$60,000 per year ... The industry had to raise wages substantially to attract the right people to the industry. That is what turned the key. For a kid just out of high school with little or no prospects, desire or aptitude for college, that is a pretty good starting wage." Present-day work schedules are also "a positive factor ... Rig hands work a 12-hour day for seven days, then have seven days off. For entry-level people, that has fixed the problem. It is a little tougher for the positions which require more specific skill and experience" (Greenberg, 2008).

Sources in the recruitment agencies do note a decline in the global mobility of the higher-paid technical consultants. National oil companies in countries outside the Organisation for Economic Co-operation and Development (OECD) have, they say, been reluctant to raise their day rates for consultants up to the levels prevailing elsewhere. The outcome was that some technical consultants, by the middle of this decade, could command around US\$1,000 a day in North America or Europe, but only US\$400 a day in South-East Asia, for comparable tasks. At the same time, national oil companies outside the OECD have tended to maintain a policy of uniform pay scales for their permanent staff, generally pegged at 25–50 per cent above the average national wage. This combination of circumstances created new opportunities for young local residents of non-OECD countries to take up technical occupations within the oil and gas sector on a contract basis. However, the national companies have not always been satisfied with the experience and qualifications of these new contractors.

Employment of both contract and permanent staff will, of course, to some extent depend on the level of activity within the industry. In July 2009, Shell CEO Peter Voser commented that the company's second quarter results "were affected by the weak global economy. This weakness is creating a difficult environment both in Upstream and

Downstream. Energy demand is weak. There is excess capacity in the market, and industry costs remain high." In a press release, Voser emphasized that Shell's restructuring "simplify Shell, programme. Transition 2009. would and increase personal accountabilities". Senior management positions had been reduced by 20 per cent "and substantial further staff reductions are likely" (Shell, 2009b). After the press conference, he was reportedly more specific about the cuts he had in mind: "I want to strip away the layers that are not creating value, putting more focus on front-line value. It means fewer people thinking about strategy and more people actually implementing it" (Perkins, 2009). This seems to confirm the impression, among some industry recruitment consultants, that the big operators do not much have much scope for new cuts in their frontline workforce. even when energy demand weakens. Nor, given the skills shortage, do they have unlimited sources of new recruits.

As the British offshore industry association Oil & Gas UK told a parliamentary committee in 2009, "global demand in recent years for skilled oil and gas personnel has led to shortages across the sector, raising the necessity for the UK industry to work collaboratively to address its needs for a skilled, effective and safe workforce. The industry and the unions together regarded this matter as of such importance that they took steps to reacquire OPITO, the offshore industry's training organization ... to form OPITO, the Oil & Gas Academy in 2007" (Oil & Gas UK, 2009a). But this does not mean that the banking crisis will leave employment in the sector unscathed. The same parliamentary committee predicted in June 2009 that the oil and gas industries in the United Kingdom could lose 50,000 jobs if investment prospects did not improve (Perkins and Davies, 2009).

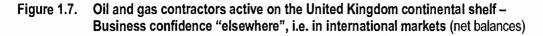
In the North Sea and elsewhere, the employment signals have been mixed. The Scottish city of Aberdeen is the hub of E&P on the United Kingdom continental shelf (UKCS). Over the past decade, the Aberdeen & Grampian Chamber of Commerce has published an annual oil and gas survey. Prepared with the Fraser of Allander Institute at the University of Strathclyde, the report is based on a representative sample of companies, both British and from elsewhere, that are active on the UKCS. Its 2009 survey (Aberdeen & Grampian Chamber of Commerce and Fraser of Allander Institute, 2009) concentrates on employment issues – not least the question of where oil companies recruit their labour. The answers came mostly from other oil companies.

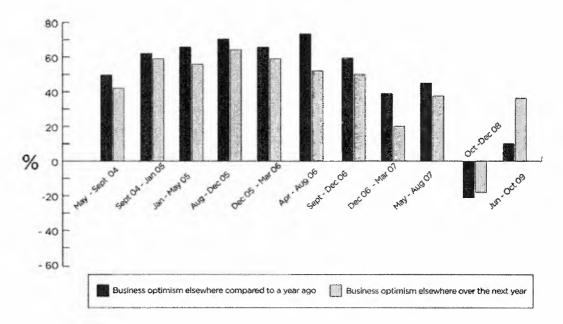
Among the 2009 survey's main findings were:

- the UKCS and the global oil sector are "in a period of declining investment, reassessment of projects and heightened concern as to costs";
- the proportion of contractors reporting that they were working at or above optimum levels on the UKCS "eased to the lowest levels recorded by the survey, although some improvement is anticipated for 2010";
- skill shortages and recruitment difficulties "were again reported, although not to the same extent as in previous years";
- in 2010–13, "the majority of operators expect to reduce staff" but "50 per cent of contractors expect to increase staff";
- the main sources of staff "continued to be other oil and related companies in the UKCS".

Most operators said they had been less confident about the international market in 2008 and 2009, but were more confident for 2010. Over the same period, one-third of contractors reported rising international business confidence, and 22 per cent said it was declining. Looking forward to 2010, 45 per cent of contractors were more confident and

only 10 per cent were less confident. Figure 1.7 traces contractors' confidence in international markets according to the Aberdeen & Grampian survey.



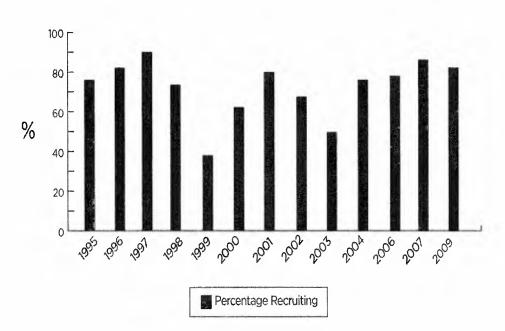


Source: Aberdeen & Grampian Chamber of Commerce and Fraser of Allander Institute, 2009.

Among contractors, the decline in international activity was less pronounced than the decline in UKCS-based activity; however, 35 per cent reported reduced non-UKCS work and only 23 per cent reported an increase in work overseas. However, 48 per cent expected an increase, and only 24 per cent a decrease, in internationally-based contract work during 2010. Despite the recent downturn in activity and investment, "all operators and 82 per cent of contractors" were seeking to recruit. But 60 per cent of the operators and 69 per cent of the contractors said their recruitment was mainly to replace regular staff. "Changing and declining levels of employment amongst both operators and contractors were more widely seen in terms of reduced employment of contract and temporary staffs." Contractors' own employment of contract and temporary staff "was reduced in 2009 and the decline is expected to continue through the next year". For 2010–12, the proportion of UKCS operators expecting to increase their core staff was the same as those expecting a decrease: 20 per cent in each case. But no less than 80 per cent were expecting to reduce their contract staff. Amongst contractors, 50 per cent expected to increase their core staff over the same three-year period.

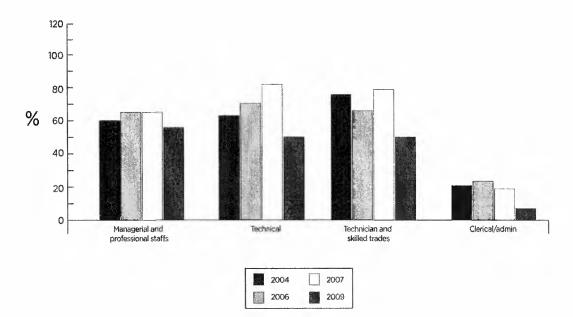
Figure 1.8 shows the percentages of UKCS contractors seeking to recruit staff in 1995–2009, while figure 1.9 compares the percentages of contractors who reported difficulties in recruiting various categories of staff in 2004–09. As may be seen, recruitment difficulties waned between 2007 and 2009, but were still substantial. The survey found "some evidence that the changing labour market is a factor in recruitment difficulties in some specialist areas". It explains that "whilst firms are seeking to reduce salary costs, candidates still have high remuneration expectations". The survey's findings on pay are among those analysed in Chapter 2 of this working paper.

Figure 1.8. Contractors active on the United Kingdom continental shelf: Percentages seeking to recruit staff



Source: Aberdeen & Grampian Chamber of Commerce and Fraser of Allander Institute, 2009.



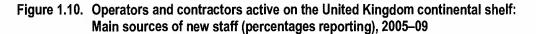


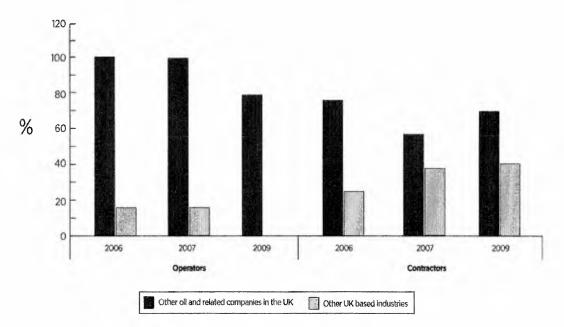
Source: Aberdeen & Grampian Chamber of Commerce and Fraser of Allander Institute, 2009.

Both operators and contractors on the UKCS cited other oil and oil-related companies in the United Kingdom as their main source of new staff. However, as figure 1.10 shows, the proportion of contractors recruiting chiefly from oil and oil-related companies is markedly lower than the proportion of operators doing so. According to the Aberdeen & Grampian survey, this reflects "the wider skill set among contractors". International recruiters for the industry note similar trends elsewhere in the world.

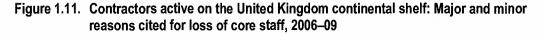
Figure 1.11 indicates the major and minor reasons given by UKCS contractors for their losses of core staff in 2006–09. The survey notes that the proportion of contractors

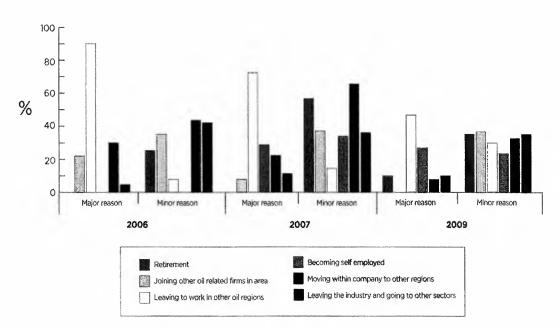
who reported core staff leaving to join other oil-related firms in the area "has decreased from 90 per cent in 2006 to 48 per cent in 2009, reflecting the easing of demand in the labour market". The proportion of workers moving to other oil-producing regions, either within the same contractor company or after leaving it, may also be seen in figure 1.11. Global mobility among contractors' employees appears to be high, although in the view of UKCS contractors at least, it appears to have declined since 2007 as a staff loss factor. Security of employment will certainly remain a worldwide issue within contractor companies, whose workforce needs are more immediately sensitive to demand from their clients, and hence to the general state of the energy market.





Source: Aberdeen & Grampian Chamber of Commerce and Fraser of Allander Institute, 2009.





Source: Aberdeen & Grampian Chamber of Commerce and Fraser of Allander Institute, 2009.

2. Wages

2.1. Wage rates and labour costs

Oil and gas jobs tend to be relatively well paid. In the core occupations at least, these are industries in which high skills are required. Mistakes can prove very costly in terms of human lives, lost revenue, damage to expensive equipment, and environmental clean-up. So, placing restrictions on wages, recruitment and training, although certainly not unknown in the industry, is seen as a false economy by many E&P employers. In ancillary services (for example, catering or transport), this may be less of a consideration. Industry recruitment specialists also note bigger pay gaps in refining than in E&P, where many job categories are, in any case, mainly occupied by contract workers. In countries outside the OECD, pay differentials between locally recruited labour and expatriates are a frequent bone of contention.

In any industry, one medium-term influence on wage-setting will be the role of labour costs in the price of the product. For most oil and gas operators, this does not appear to be a major concern. Off the record, some concede that labour costs "are not our single biggest worry", although they are reluctant to talk figures. Significantly, recent detailed studies of oil price determinants make no mention either of wages or of labour factors in general (Dées et al, 2008; International Energy Agency (IEA), 2009).

Payroll costs also tend to form a relatively small part of oil and gas companies' outlay. In 2008, Eni's payroll and related costs were \notin 4,004 million out of total operating expenses of \notin 80,412 million (Eni, 2009).

Pay in the Norwegian offshore industry seems to be high, and operating company employees (a minority, comprising only about 25 per cent of the workforce) do somewhat better than contractor employees. In 2009, total average annual pay was 634,000 Norwegian kroner (NOK) for operator employees offshore, and NOK530,000 for contractor employees. Both were well above the average manufacturing wage of NOK354,000. Wage structures in the oil industry have not changed significantly since the year 2000. At 19 November 2009 values, the Norwegian annual offshore pay rates would have been worth about US\$112,730 (operator employees) and US\$94,300 (contractor employees). Norwegian wages in the oil and gas industries are not directly linked to productivity, but some companies do pay performance-related bonuses (OLF, 2009 ILO survey response).

Norway has a specific national collective agreement for oil and gas service companies (NHO/OLF/LO/IE, 2008). Sixty companies are individually or collectively signed up to it, including many of the biggest multinationals in the sector. The pay scales operating under that agreement, as from 1 June 2009, are shown in table 2.1.

Table 2.1.Pay scales for oil and gas service companies under the Norwegian collective agreement,
as from 1 June 2009

Position 1	Seniority steps										
		Abolished 1 Jan. 2010	1								Introduced 1 Jan. 2010
0	0	1	2	3	4 5 6		6	6 7		9	10
MWD engineer ²		492 420	504 786	517 152	529 518	541 884	554 250	566 616	582 355	597 520	612 685
Senior well technician ³		471 855	483 832	495 808	507 786	519762	531 739	543 716	559 417	574 582	
Well technician ⁴		459 452	470 981	482 511	494 044	505 574	517 105	528 635	543 892		
Roustabout/ rigger	407 846	416 739	425 634	434 527	443 420	452 315	461 207	470 102	482 721		

¹ Job titles shown are translations of the first Norwegian job category on each scale. ² The MWD (measurement while drilling) engineer scale also applies to supervisors, field geologists, and well specialists. ³ The senior well technician scale also applies to senior operators and engineers, senior data engineers, electrical and instrument technicians, specialized crane operators, senior diving technicians, and deck foremen. ⁴ The well technician scale also applies to data engineers, geologists, skilled workers, welders, crane operators, and diving technicians. Source: Norwegian Oil Industry Association (OLF) (information communicated).

In Ecuador, there are no significant differences between pay structures for company workers and those for contract workers. The average monthly wage in Ecuador's oil and gas industries is US\$650, as against an average industrial wage of about US\$450. There have been no significant changes in wage structures over the past decade. Productivitylinking of pay is not practised in the industries, and there is no evidence that pay rates and the price of oil influence each other. Pay in the sector is based on experience and there is no evidence of a gender differential (National Federation of Chambers of Industry of Ecuador, 2009 ILO survey response).

In money terms, Russian wages in crude oil extraction and natural gas have increased rapidly. The average monthly wage was 25,098 rubles (RUB) in 2004, and RUB47,188 in 2008 (equivalent to US\$874 and US\$1,642, at the exchange rate applying on 19 November 2009). Service organization employees are paid 15 per cent below this rate. The total remuneration package is linked to productivity via the pay and bonus provisions in the collective agreement. Wages in the oil and gas industries depend on market trends. This influence is felt to a greater degree by the employees of service organizations. Wages account for 12–14 per cent of the sector's costs, but their impact on oil prices is low. There are no wage differences between union members and non-members, nor between men and women (ROGWU, 2009 ILO survey response).

Australian pay rates for offshore support occupations have risen by 30 per cent or more over the past decade. Annual rates for the able seaman/integrated rating category (covering the bulk of offshore support/supply vessel classifications) were 64,949 Australian dollars (AUD) in October 2000, and AUD 87,672 in October 2009 (about US\$60,050 and US\$81,050). For a bosun, chief cook or chief caterer (on diving support and specialist vessels), the rates were AUD82,246 in October 2000, and AUD107,706 in October 2009 (about US\$76,044 and US\$99,594). For comparison, the current average annual manufacturing wage in Australia is approximately AUD38,000 (non-skilled) and AUD55,000 (skilled). Wages are high in the oil and gas industries and employment in these industries is much sought after. There is no direct link between pay and productivity. Except for "loading" (Section 2.2. Composition of pay), company and contract workers are paid at the same rates. Equal pay is provided for male and female workers in the industry. In some cases, there are significant differences in pay and conditions between unionized and non-unionized workers. Market developments, such as the price of crude, may have some influence on wage expectations. On the other hand, labour costs have little or no bearing on the price of oil (MUA, 2009 ILO survey response).

Contract workers in the oil and gas industries of Trinidad and Tobago earn approximately 40 per cent of the income earned by company employees in the industries. In 2004, a job evaluation was undertaken in the local oil company. As a result, certain hourly-rated jobs were subsequently classified as weekly-paid jobs. This change in the wage structure for company employees had an indirect influence on pay rates for contract workers performing similar tasks. Generally speaking, the average wage earned in the islands' manufacturing sector is 30 per cent of the comparable wage in the oil and gas industries. For oil and gas companies, labour costs represent on average 30–35 per cent of operating expenses. Oil and gas wages are not based on productivity, but on the skills possessed by the worker. Local oil and gas wages are to some extent influenced by market developments. As the market price for oil increases, the union will seek to negotiate for a corresponding increase in workers' wages (OWTU, 2009 ILO survey response).

Box 2.1 shows the recommended minimum hourly rates to be paid by Canadian drilling contractors. In box 2.2, median hourly and annual United States wages are set out for a range of occupations in which contract workers are often engaged (for more detailed descriptions of the same jobs, see box 1.1).

Canadian	Box 2.1 drilling contractors – Recommended minimum hourly rates
The Canadian Association chedule for hourly paid crews	on of Oilwell Drilling Contractors recommends the following minimum hourly wage s:
Driller	C\$38.50 = US\$36.33
Assistant driller	C\$33.50 = US\$31.61
Derrickhand	C\$32.25 = US\$30.41
Motorhand	C\$27.30 = US\$25.74
Floorhand	C\$25.25 = US\$23.80
Leasehand	C\$23.00 = US\$21.68

The United States dollar conversions shown are at the exchange rate applying on 19 November 2009.

Box 2.2 Selected United States occupations in the oil and gas industries: Median hourly and annual wages for 2008

Derrick operators, oil and gas

Rig derrick equipment and operate pumps to circulate mud through drill hole.

\$20.15 hourly, \$41,920 annual

Gas plant operators

Distribute or process gas for utility companies and others by controlling compressors to maintain specified pressures on main pipelines.

\$26.81 hourly, \$55,760 annual

Petroleum engineers

Devise methods to improve oil and gas well production and determine the need for new or modified tool designs. Oversee drilling and offer technical advice to achieve economical and satisfactory progress.

\$51.93 hourly, \$108,020 annual

Petroleum pump system operators, refinery operators, and gaugers

Control the operation of petroleum refining or processing units. May specialize in controlling manifold and pumping systems, gauging or testing oil in storage tanks, or regulating the flow of oil into pipelines.

\$26.45 hourly, \$55,010 annual

Rotary drill operators, oil and gas

Set up or operate a variety of drills to remove petroleum products from the earth and to find and remove core samples for testing during oil and gas exploration.

\$23.94 hourly, \$49,800 annual

Roustabouts

Assemble or repair oil field equipment using hand and power tools. Perform other tasks as needed.

\$14.72 hourly, \$30,610 annual

Service unit operators

Operate equipment to increase oil flow from producing wells or to remove stuck pipe, casing, tools, or other obstructions from drilling wells.

\$18.07 hourly, \$37,590 annual

Wellhead pumpers

Operate power pumps and auxiliary equipment to produce flow of oil or gas from wells in oil field.

\$18.20 hourly, \$37,860 annual

For a fuller description of the tasks associated with these jobs, see box 1.1.

Source: O*NET OnLine.

Table 2.2 compares average hourly earnings for permanent and temporary employees in the Canadian oil and gas extraction sector over the past decade, while table 2.3 shows their average weekly earnings. These tables show that temporary employees' earnings are significantly lower. This may be due in part to their predominance in less skilled jobs, and to the lack of seniority steps in their pay scales; however, it should also be noted that temporary employees' earnings have increased rather faster than those of permanent employees. Thus, in Canada at least, the earnings gap has narrowed slightly over the past decade.

Table 2.2.Hourly earnings in the Canadian oil and gas extraction sector, two-year averages
from 1998 to 2008, in current Canadian dollars

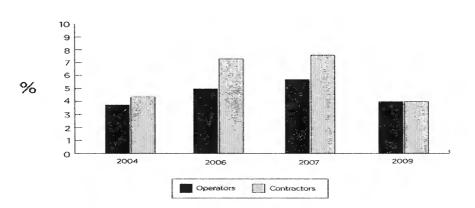
	Total employees	Permanent employees	Temporary employees
199899	23.15	23.75	15.64
19992000	24.61	25.11	18.37
2000–01	24.96	25.42	19.68
2001–02	26.60	27.21	20.46
2002–03	27.76	28.57	20.80
2003–04	28.02	28.76	21.29
2004–05	29.25	29.94	21.25
2005–06	30.53	31.30	20.15
2006–07	31.93	32.59	22.63
2007–08	33.49	34.05	26.01

	Total employees	Permanent employees	Temporary employees
1998–99	957.07	979.93	670.18
1999–2000	1 022.84	1 040.39	802.41
2000–01	1 050.83	1 067.01	864.72
2001–02	1 117.20	1 140.01	888.50
2002–03	1 161.81	1 195.41	870.82
2003–04	1 167.92	1 201.01	866.24
2004–05	1 234.05	1 264.01	886.27
2005–06	1 288.02	1 316.91	898.30
2006–07	1 340.49	1 362.45	1 030.34
2007–08	1 406.81	1 424.56	1 170.07

Table 2.3.Weekly earnings in the Canadian oil and gas extraction sector, two-year averages
from 1998 to 2008, in current Canadian dollars

On the UKCS, "the average pay increase in 2009 eased to the levels reported in 2004", according to the Aberdeen & Grampian survey (Aberdeen & Grampian Chamber of Commerce and Fraser of Allander Institute, 2009). "Whereas in 2007 over 90 per cent of all respondents reported increasing pay, only 49 per cent reported increasing pay in 2009 and the average increase in pay eased to 4 per cent. This is probably an overestimation of trends in the industries as a number of respondents reported pay freezes and rate reductions of 10 per cent being requested by clients." Pay freezes and the ending of bonus payments were also reported in some cases. Reported changes to terms and conditions included the reduction or abolition of minor benefits and increases in pension costs to employees. Altogether, 18 per cent of British-based firms and 24 per cent of overseas firms active on the UKCS reported substantial changes to terms and conditions. But "unlike 2007 when the main emphasis was the enhancement of terms", most of the changes in 2009 were not in the employees' favour. Figure 2.1 shows that average pay increases on the UKCS slowed between 2007 and 2009, after a fairly rapid climb from 2004. It may also be seen that contractor pay increased faster than operator pay in 2004–07. But by 2009, the rate of increase had evened out.

Figure 2.1. Operators and contractors active on the United Kingdom continental shelf: Average pay increases (per cent), 2004–09



Source: Aberdeen and Grampian Chamber of Commerce and Fraser of Allander Institute, 2009.

2.2. Composition of pay

Under the Norwegian collective agreement for oil and gas service companies (NHO/OLF/LO/IE, 2008), annual wages consist of the normal monthly wages x 12 + 47 per cent offshore supplement, assuming a full person-year offshore. The offshore supplement includes compensation for participation in emergency drills and false alarms and additional payments for dirty work and lifeboat manoeuvres.

Monthly wages are arrived at as follows:

<u>Annual wage x 100</u> = Monthly wage 147×12

Adjusted monthly wages (including vacation pay) are arrived at as follows:

 $\frac{\text{Monthly wage x 47.08}}{52.14} = \text{Adjusted monthly wage}$

The daily offshore supplement is arrived at as follows:

 $\frac{\text{Monthly wage x } 12 \text{ x } 0.47}{146} = \text{Daily offshore supplement}$

The national agreement leaves scope for local or company-level bonus arrangements. Within the annual wages, the local parties can agree that shelf compensation (a bonus for working on the continental shelf) will be a fixed sum.

The national agreement does specify that the daily offshore supplement x 146 shall not exceed 50 per cent of the basic wage. So, where a local agreement is made, the monthly wages are then calculated as follows:

<u>Annual wage – (daily shelf compensation x 146)</u> = Monthly wage 12

Adjusted monthly wages after this point will be arrived at as follows:

 $\frac{\text{Monthly wage x 47.08}}{52.14} = \text{Adjusted monthly wage}$

One significant pay factor in some countries is the "loading" of the rates for contract workers. For example, under agreements signed by the MUA, a 20 per cent loading is paid to "casual employees" (contract workers) as compensation for not receiving the employer-financed private health cover and the 28 days' annual leave to which permanent company employees are entitled (MUA, 2009 ILO survey response).

For one-off or seasonal activities requiring particularly rapid work and high productivity, special bonuses may be payable. This is often the case for refinery turnarounds, which may be the subject of time-bound supplementary collective agreements. In 2008, for example, a supplementary agreement was signed between Chevron, the United Kingdom trade unions Unite and GMB and the National Joint Council for the Engincering Construction Industry. The agreement was in force from 10 September to 24 October only, and was concerned purely with the turnaround at Chevron's Pembroke refinery in Wales. Even immediate pre-turnaround work and all immediate post-shutdown work were explicitly excluded from its provisions. The agreement set a fixed productivity allowance of \pounds 0.90 for all skilled grades (pro rata for others), plus an incentive bonus arrangement of \pounds 1.25 for all skilled grades (pro rata for others). The fixed element of the

payment was "made in return for the achievement of maximum productivity, flexibility and mobility". The terms of the agreement were strict. For example, any unauthorized absence was to result in the loss of one week's bonus (Chevron, 2008).

2.3. Minimum wages

While most countries have legislation on wages, this is aimed mainly at setting minimum standards. As pay rates in the oil and gas industries are, in most cases, substantially higher than the manufacturing average, wage legislation will have little or no impact in practice on pay levels in the oil and gas industries of most countries. In exceptional cases, however, the application of minimum wage standards might be of benefit to some workers in the industry (for example, the Nigerian contract workers on "pittance wages"; box 1.5).

In a few countries, a legally prescribed bonus may be payable at the end of a nonpermanent work contract. An example is France's "precarity indemnity", which in principle is currently set at 10 per cent of the total gross remuneration of the temporary employee. However, it is hedged about with conditions that would make it inapplicable to at least some individual contract workers in the oil and gas industries. It is not usually payable in the case of seasonal work; nor is it payable on automatically renewed contracts. On the other hand, workers taken on to meet urgent and exceptional production needs, tackle urgent safety issues or temporarily replace other workers could qualify. It would not, of course, apply to the permanent employees of contractor companies (Mecquignon, 2009).

3. Work organization and working time

3.1. Work time patterns

Working time arrangements in the oil and gas industries show considerable variation worldwide. For offshore workers, the most frequently cited pattern is 12 hours on and 12 hours off continuously for two weeks, followed by a two- or three-week rest period ashore. In refineries, 12-hour rotating shifts are typical.

Australian rig workers' salaries are based on 12 hours a day, seven days a week while offshore. Depending on the agreement and the location, the duty periods can be: one week on duty, one week on leave; two weeks on duty, two weeks on leave; four weeks on duty, four weeks on leave; or five weeks on duty, five weeks on leave. All agreements signed by the MUA have defined periods of work and rest, including "exhaustion clauses" designed to prevent fatigue. Working times for contract labour do not vary from those for permanent employees (MUA, 2009 ILO survey response).

In the Russian Federation, a 40-hour week is the norm for both operators and contractors. This situation has remained unchanged over the past decade, and a 40-hour week is not regarded as excessive by oil and gas workers (ROGWU, 2009 ILO survey response). Oilfield workers in Ecuador, whether company or contract employees, work a 77-hour, seven-day week, with overtime paid for the hours put in beyond the standard 40 per week. These arrangements have remained unaltered over the past decade. The realities of oilfield production make it difficult to change the working time system. Instead, the preference has been for extra leave entitlements in compensation. The patterns are 14 days on and 14 off; or 14 days on and seven off. Contract workers' conditions, including working hours and wages, are determined by civil contracts signed between the worker and the employer (National Federation of Chambers of Industry of Ecuador, 2009 ILO survey response).

By law, Norwegian weekly working time offshore averages 36 hours. For those covered by collective agreements, it averages 33.6 hours. By agreement, the schedule is 14 days' work at 12 hours per day, then 28 days off. The law says workers should have one third of the time they have been offshore free, before going offshore again. The schedule is, in principle, the same for operators' employees and for many of the contractors' and subcontractors' employees. In some of the subcontractor companies, however, employees are available to work for the company during a period of up to six weeks, and then have time off for up to four weeks. But they still cannot work more than the average 36 (or 33.6) hours per week over the course of a year (PSA, 2009 ILO survey response). All offshore workers have an annual working time of 1,582 hours, with five weeks' holiday. But some companies have opened up for rotations that result in an average of 1,460 hours per year. Employees following this rotation have taken an equivalent pay cut (OLF, 2009 ILO survey response). The PSA, as part of the background research for its Trends in Risk Levels survey, put a number of questions to Norwegian oil workers about their working time patterns (PSA, 2009). Tables 3.1, 3.2 and 3.3 show their responses on the basis of data provided by the PSA, which distinguish between the employees of operators, contractors and shipping companies.

On installations in the United Kingdom North Sea sector, "the most common work pattern is two weeks offshore alternating with two weeks shore leave (2-2 pattern). Less frequently, 3-3 or 2-3 patterns (or combinations of 2-2 and 3-3 schedules) are worked". However, "specialist personnel, who frequently move between different installations, often have irregular and/or unpredictable work patterns in both the Norwegian and United Kingdom sectors" (Parkes, 2007; leave weeks indicated in bold type).

For Canadian drilling contractors, the most common work schedule is 12-hour shifts. "However, work schedules will vary from contractor to contractor or even from rig to rig! A typical 12-hour shift work schedule might look like this: first seven days: 7 a.m.–7 p.m.; second seven days: 7 p.m.–7 a.m.; third 7 days: TIME OFF" (CAODC, 2006). Table 3.4 compares the average usual hours worked by permanent and temporary employees across the Canadian oil and gas extraction industries.

		Do you do a tour of duty			
		Yes	No	Total	
Operator	Responses	2 340	136	2 476	
	Percentage of workforce	94.5	5.5	100	
Contractor	Responses	1 886	696	2 582	
	Percentage of workforce	73.0	27.0	100	
Shipping company	Responses	1 363	108	1 471	
	Percentage of workforce	92.7	7.3	100	
Total	Responses	5 589	940	6 529	
	Percentage of workforce	85.6	14.4	100	

Table 3.1."Do you do a regular tour of duty offshore?" Responses by employees of oil industry
operators, contractors and shipping companies, Norway, 2007–08

		Which shift	pattern do you	ı work?				
		Permanent day shift	Permanent night shift	Whole shift (nights for two weeks, days for two weeks, on alternate tours)	Swing shift: seven nights then seven days	Swing shift: seven days then seven nights	Shift pattern varies	Total
Operator	Responses	1 491	53	586	62	7	255	2 454
	Percentage of workforce	60.7	2.2	23.9	25	0.3	10.4	100
Contractor	Responses	1 166	43	104	201	133	933	2 580
	Percentage of workforce	45.1	1.7	4.0	7.8	5.2	36.2	100
Shipping	Responses	360	67	23	505	396	117	1 468
company	Percentage of workforce	F 24.4	4.6	1.6	34.4	27.0	8.0	100
Total	Responses	3 017	163	713	768	536	1 305	6 502
	Percentage of workforce	f 46.4	2.5	11.0	11.8	8.2	20.1	100

Table 3.2."Which shift pattern do you work?" Responses by employees of oil industry operators,
contractors and shipping companies, Norway, 2007–08

Source: Petroleum Safety Authority Norway (information communicated).

Table 3.3."Do you always work on this installation?" Responses by employees of oil industry
operators, contractors and shipping companies, Norway, 2007–08

		Do you always work on this installation?						
		Yes, every time	Yes, generally	No, it varies	Total			
Operator	Responses	2 197	123	152	2 472			
	Percentage of workforce	88.9	5.0	6.1	100			
Contractor	Responses	974	408	1 197	2 579			
	Percentage of workforce	37.8	15.8	46.4	100			
Shipping company	Responses	1 249	84	136	1 469			
	Percentage of workforce	85.0	5.7	9.3	100			
Total	Responses	4 420	615	1 485	6 520			
	Percentage of workforce	67.8	9.4	22.8	100			

	Total employees	Permanent employees	Temporary employees
1998–99	41.6	41.5	42.8
1999–2000	41.8	41.7	43.0
2000–01	42.6	42.5	44.0
2001–02	42.4	42.3	43.4
2002–03	42.1	42.2	40.8
2003–04	41.9	42.1	40.0
2004–05	42.7	42.8	41.5
2005–06	42.7	42.7	43.4
2006–07	42.2	42.1	44.5
2007–08	42.3	42.1	44.4

Table 3.4. Average usual hours worked per week in the oil and gas extraction industries, Canada, two-year averages from 1998 to 2008

3.2. Legal frameworks

In many cases, oil and gas workers are covered by the general working time legislation in the country concerned. This also applies to contractors' employees. Exceptions are sometimes made for offshore work, but there is a tendency to bring it within the scope of general working time legislation.

Almost all countries set a general standard legal working week. More than 40 per cent of countries have a limit of 40 hours or less. Among the others, there is an almost even divide between those that have 42- to 45-hour limits and those that specify a 48-hour week. The 48-hour standard predominates in Latin America and, to a lesser extent, in Asia. More than two-thirds of countries also have some kind of maximum limit on weekly working hours. In more than one third of those that have legal maximums, the limit is between 48 and 60 hours (ILO, 2008; includes country-by-country data for 2006–07 on legal working time provisions).

Some countries' legislation limits the use of overtime by setting criteria for when overtime can be performed, or lays down the procedures to be followed before it is introduced. Where overtime is permitted, most laws limit the number of hours that can be worked and provide for compensation in the form of either enhanced pay or an equivalent rest period. There may be statutory requirements as to how overtime is to be shared out amongst the workforce (McCann, 2005).

In European Union countries, the provisions of the Working Time Directive apply. In the 2003 consolidated version of the Working Time Directive, coverage extends to all oil and gas workers in the European Union, whether onshore or offshore – but with some variations, as summarized below (European Union Official Journal, 2003).

The directive requires European Union Member States to take the measures necessary to ensure that every worker is entitled to:

- a minimum daily rest period of 11 consecutive hours per 24-hour period;
- a rest break, where the working day is longer than six hours;

- a minimum uninterrupted rest period of 24 hours for each seven-day period, which is added to the 11 hours' daily rest;
- a maximum weekly working time of 48 hours, including overtime;
- paid annual leave of at least four weeks.

In principle, any European Union country's legislation must at least meet these standards. It can adopt more rigorous working time laws if it wishes.

In order to calculate weekly averages, European Union Member States may lay down reference periods:

- not exceeding 14 days for the weekly rest period;
- not exceeding four months for maximum weekly working time;
- with regard to the duration of night work, in consultation with the social partners or giving them this option by means of collective agreements.

Night work is not to exceed an average of eight hours in any 24-hour period.

Certain derogations to these principles may be adopted by means of collective agreements or industrial agreements. Among other reasons, derogations may be granted "in the case of certain activities, such as offshore activities, where the worker's place of work and his place of residence are distant from one another". They are also possible "in the case of activities involving the need for continuity of service or production". Gas production and distribution are among the industries for which derogation possibilities are specifically mentioned. In such cases, a compensatory rest period is to be granted.

Reference periods for offshore workers may be extended to 12 months for calculating the maximum weekly working hours.

More generally, derogations from reference periods for calculating weekly working time may not exceed six months, or, in the case of a collective agreement, 12 months. A European Union Member State may authorize an employer to derogate from the maximum of 48 hours of work per week, provided the worker agrees. But no worker is to be "subjected to any detriment" because of a refusal to give such agreement.

In practice, the interpretation of the directive has caused disputes in a number of European Union countries, with cases being brought before national courts and the European Court of Justice. So, in June 2008, the European Union Member States agreed on a political clarification of the rules (European Commission, 2008):

- On-call time to be split into active and inactive on-call time. Active on-call time to be counted as working time.
- Inactive on-call time may not be counted as rest time and can be counted as working time if national laws or social partners agree.
- Standard maximum limit remains at 48 working hours per week unless an individual worker chooses otherwise (opt out).
- New protective limit (cap) for workers who opt out: maximum working week of 60 hours unless social partners agree otherwise.

- New cap for workers who opt out if inactive on-call time is counted as working time: maximum working week of 65 hours.
- The cap protects all workers employed for longer than ten weeks with one employer.
- Opt out only under certain conditions, such as: no signature during first month of employment, no victimization for not signing or withdrawing opt out, employers must keep records on working hours of opted-out workers.

In 2005, a United Kingdom employment tribunal ruled that the Working Time Directive applies to United Kingdom offshore workers beyond the 12-mile limit of British territorial waters (Amicus (now part of the Unite union), 2005).

Reporting in 2006 on the operation of the directive's provisions for offshore workers, the European Commission noted:

Offshore work concerns only a few Member States and an estimated 30,000 or so workers [in the EU]. A single Member State – the United Kingdom – employs the vast majority (25,000) of offshore workers. Since the amendment introduced in 2000, the Directive covers offshore workers but gives the Member States the option of derogating from several of its provisions provided that the workers concerned are afforded equivalent compensatory rest periods. It may be observed, however, that the majority of Member States have not made use of this option and offshore workers are therefore covered by national legislation on daily or weekly rest periods, breaks and night work. The United Kingdom is the only Member State to have made full use of the scope for derogations for offshore workers. It would also appear that collective agreements, where they exist, provide for more favourable arrangements than the minimum requirements laid down in the Directive, particularly as regards maximum weekly working hours and annual paid leave. The flexibility of the provisions of the Directive as regards offshore workers probably explains why the Member States are fairly unanimous that they are adequate for the sector in question and should not therefore be amended. Employers and employees, on the other hand, have not voiced their opinions following the consultation launched by the Commission. Given the views expressed by the Member States concerned and the absence of comments by employers and employees, the Commission considers that no changes need to be made to the rules on the organization of working time for offshore workers (European Commission, 2006).

3.3. Work organization and gender

Although some oil and gas contractors have 10 per cent or more women in their workforce, female employees tend to be concentrated in administrative roles. At Aker Solutions, for example, women constitute 24 per cent of the administrative personnel but just 3 per cent of the skilled workers/operators (Aker Solutions, 2008). In Trinidad and Tobago, most female contract workers in the oil and gas industries are in administrative jobs, but approximately 10 per cent of non-administrative contract workers are women (OWTU, 2009 ILO survey response).

In the Russian Federation, the organization of working time generally takes account of the requirements of gender equality (ROGWU, 2009 ILO survey response). In the Australian oil and gas industries, current working time arrangements contribute "possibly very little" to the promotion of gender equality, but "the leadership of the union movement is wise to this issue". The environment "is not generally female friendly" and both employers and employees need to work to improve it (MUA, 2009 ILO survey response).

Female Future is the name of a programme launched by the Confederation of Norwegian Business and industry (NHO) to develop women's careers. The oil and gas section of Female Future is run by the OLF. It aims both to increase general female participation in the oil and gas industries and to get more women into management and leadership positions. The emphasis is on coaching and individual development. The Norwegian Central Statistical Bureau currently puts women's workforce participation in the petroleum sector at around 20 per cent. In 2010, the OLF's Female Future scheme will focus on training 20 "hand-picked women from the oil and gas industry" for "development as leaders and role models". Behind the sessions is Anne Vedvik, an engineer who works as a well-planning team leader for ConocoPhillips in the Ekofisk field. Her experience of the job has been overwhelmingly positive and she wants to help other women," she says. It provides "technical challenges, development opportunities and, not least, a lot of fun" (OLF, 2009a). A recent guest speaker at Female Future was StatoilHydro Director Helge Lund, who pointed out that female participation in StatoilHydro was 37 per cent. "We're not there yet, but we're well on the way. We're working systematically to increase the proportion of women within traditionally male-dominated jobs" (OLF, 2009b).

"Family-friendly" work organization, although not specifically a gender issue, can certainly affect women's perceptions of an industry. This topic is examined separately in the following chapter.

4. Reconciling work and family life

While the oil and gas companies have become dependent on the greater availability of women, and increased local and global competition among enterprises has meant increased demands on the workforce, few arrangements have been made so far to reconcile work in the oil and gas industries with family life. Objectively, this would be difficult in some cases – notably offshore tours of duty. However, it may be said that an industry that is not family-friendly may not attract many women, and an industry that employs few women among its frontline workers will tend not to give high priority to making itself family-friendly.

Maternity protection for women workers has been a core issue for the member States of the ILO. The Maternity Protection Convention, 2000 (No. 183), aims to enable women to continue successfully their reproductive and productive roles, and to prevent unequal treatment in employment because of their reproductive role.

As women continue to participate in the paid labour market in increasing numbers, and with families becoming more reliant on more than one wage earner, traditional solutions to reconciling work and family life are under great strain. Changes in marriage, divorce and fertility rates have impacted on family structure and who addresses family needs in the home. The Workers with Family Responsibilities Convention, 1981 (No. 156), aims to create effective equality of opportunity and treatment for men and women workers. It requires ratifying member States to make it a goal of national policy to enable people with family responsibilities who are engaged, or wish to engage, in employment to exercise their right to do so without being subject to discrimination and, to the extent possible, without conflict between their employment and family responsibilities. Convention No. 156 also requires governments to take into account the needs of workers with family responsibilities when considering community planning and to develop or promote community services, public or private, such as childcare and family service and facilities.

For the oil and gas industries, the family-friendliness issue is clearly linked to the question of duty rosters and time off. In the Ecuadorean industry, as it would be very difficult to change working schedules, "it is not possible to reconcile work with domestic responsibilities on the same dates. The compensation is to be found in the increased number of days for leisure at home with the family" (National Federation of Chambers of Industry of Ecuador, 2009 ILO survey response). The Australian unions, on the other hand, are now introducing "family-friendly" clauses into collective agreements, including

maternity/paternity leave, compassionate leave and adoption leave. These "will take time but are on the agenda" (MUA, 2009 ILO survey response).

The discussion about family-friendliness in the industries is not wholly new. In 2000, a British study (McKee et al., 2000) looked at employer attitudes to this question, as part of a broader project on the ethnography of the oil industry in Scotland.

The researchers interviewed human resources personnel based in the United Kingdom from 18 oil and gas companies, of which 16 were operators and two were contractors. Companies headquartered in Canada, France, Italy, Norway and the United States were included. Ten of the interviewees were women and eight were men. The researchers wanted to know "how the term 'family-friendly' is understood and used by oil and gas companies", within a "global business associated with pioneering labour market changes, with high levels of institutionalized insecurity and traditionally a male-dominated labour force". Not, of course, that the masculinity of the workforce either need or should rule out a family-friendly approach. But the study explored "whether there are internal or external pressures on companies to instigate change and whether company personnel feel that their policies are meaningful and capable of implementation".

In the majority of companies sampled, there was "evidence of a raising of consciousness of work-family issues". A number of the interviewees "noted that attitudes had liberalized over time, with family issues becoming mentionable within the work context". But two managers, both male, "expressed doubts about whether companies should engage in debates about work-family relationships, stating that the industry's maturity means that employees are self-selecting, 'know the score', and that high remuneration levels compensate for home-work conflicts". One interviewee felt that "the women that we do recruit tend to be fairly professional women who have their lives sorted out, or it just wouldn't work".

Of the 18 companies, "one had its own workplace nursery; two others were reviewing childcare policies with a view to introducing nursery vouchers or other direct childcare benefits; several provided spouse employment support or advice; a number had introduced flexitime and enhanced maternity, dependant and maternal leave and career breaks". One company "offered women substantial 'returners' bonuses". Part-time or reduced working hours were described as gaining acceptance, and, in one company, job-sharing at a managerial level had been initiated. At the time of the study, "the industry was excited by the introduction of a 'nine-day fortnight' by several companies". This innovation "was billed as 'family-friendly' (even though it was a compacted working week rather than time off) and its implications and potential were being closely watched by comparator companies".

Notable findings from the study:

- "The issue of contractor versus operator cultures appears to be significant." Family-friendly policies "tended to focus and have more impact on core onshore workers or staff employees offshore". The policies "could exclude groups of other employees: for example, contractors, highly mobile workers, those working long hours at all levels, those on permanent on-call conditions". Such workers "were obliged to have their family life sorted without organizational supports and not expect concessions".
- There is an agreed industry hierarchy "in the development of human resources/employee relations policies and in the setting of terms and conditions". This could be relevant to family-friendliness but also to employment conditions more generally in the oil and gas industries. "There is evidence of tacit and formal networking and information flows supporting this ranking of companies' leadership in policy setting and the development of employee 'packages'. Some companies had

acquired reputations as pack 'leaders' or laggards. 'Pioneering' companies were also often associated with other, technological or organizational innovations." This checking and comparing of conditions "would seem to provoke both conformity and innovation, with certain companies having more freedom to break ranks and take risks. As one respondent put it 'the oil industry are like sheep and follow on once somebody else has set the target'."

- The more innovative policies were generally found in the larger multinational oil and gas companies. "Other companies' initiatives tended to be more modest and focused around such areas as enhanced maternity leave and childcare. For all such companies 'family-friendly' policies were predominantly targeted at onshore, or core staff." These respondents also tended to identify the term "family-friendly" with "women's issues". There was little reference to the fact that, as the average age of offshore workers has been rising, they are more likely to have responsibilities to elderly or sick relatives.
- The business case for family-friendliness was made mainly in terms of attracting or retaining staff. "Many companies were competing for highly technical staff, operating on a global basis, and were trying to attract skilled personnel from overseas, where employee conditions may be far superior." For the reasons discussed in Chapter 1, this may be even more of a concern today than when the interviews were conducted at the end of the 1990s. An industry with a major skills' shortage is likely to put more effort into recruiting women. A closely related point made by a number of interviewees is that family-friendliness can improve the sector's image. The idea that an industry is dirty, rough and polluting puts it at a serious disadvantage when recruiting younger employees, particularly at the levels of skill and education often required by the oil and gas industries. Anything that helps to counter that image is likely to make the industries more attractive to younger recruits. Similarly, a greater concern with helping spouses to adjust and to find employment in new surroundings reflects an awareness that employees' mobility is increasingly determined by their family circumstances.
- "The role of worker demands and employee pressure on the industry to make its practices more 'family-friendly' was less easy to detect." This "may partly reflect the low levels of unionization in operator companies", but it might also be that the researchers "have yet to incorporate fully the perspectives of trade unions or associations". In any case, "significantly, human resources personnel did not typically cite any groundswell of employee-led demand for change".
- Many of the human resources personnel interviewed felt that the rhetoric of familyfriendliness "failed to materialize into practical policies" (McKee et al., 2000).

More recently, a Norwegian study looked at the difficulties of reconciling family and social life with oil industry jobs involving shift work. All 3,038 employces of a large Norwegian oil and gas company who worked onshore and offshore in August 2006 were invited to take part in the study. Some 1,697 did so – a response rate of 55.9 per cent. Slightly more men than women responded. The majority of the shift workers responding "reported few problems with social and domestic/family life, and they had more than enough time to spend by themselves and with their partner, close family, friends, social relations, and children". However, the Norwegian petroleum industry has a number of different shift systems (table 3.2), and their impacts appeared to vary. The highest mean scores relating to problems that shift work might raise for an employee's social and domestic/family life "were found among those working 'one day period and one night period offshore' and those with onshore shift arrangements" (Haugene Ljoså et al., 2009).

5. Occupational safety and health

Occupational safety and health are not issues on which responsible employers and workers fundamentally disagree. Both sides wish to prevent the human tragedies caused by work-related accidents and diseases. Beyond that, they both recognize the seriousness of losing precious lives because of poor working conditions and the environment. They also recognise the financial implications. They know that poor safety and health at work can put a company's whole future at risk. Oil and gas companies are also aware that their safety and health performance will strongly affect their reputation among their most important partners – trade unions, shareholders and the public at large. Safety statistics are included in their annual reports and they show an improvement over the time.

Some types of worker may give rise to particular safety and health concerns. Contract workers are one such vulnerable group. Throughout the industries, there is some evidence that contract workers have a higher likelihood of being involved in workplace accidents. An ILO report on the employment relationship noted that a link between accident risks and a lack of workers' protection has "been observed in situations where there is extensive use of subcontracting. The issue is not subcontracting itself but its improper use, which can create or aggravate risks". Some of the accidents involved "can also impact on the health and safety of third parties and society in general". That includes environmental impacts. Issues of training are also involved here: "Enterprises can be reluctant to invest in training workers who will probably not be with them for long. The user enterprise of a subcontractor is unlikely to train the workers supplied by that firm, except for very specific purposes. Untrained workers are more vulnerable to accidents in the workplace and can hamper the competitiveness of the enterprise" (ILO, 2003).

Similar occupational safety and health gaps have sometimes been seen in the oil and gas industries. One suggested reason for the different accident rates is that people employed temporarily within a workplace will be less aware of its safety procedures, and, perhaps, less committed to them. Also, sheer unfamiliarity with a workplace can in itself be a risk factor. If contract workers are under greater pressure than their permanently employed counterparts, this may also account for different accident rates. A further explanation is that contract workers are more likely to be in the most dangerous jobs. The reality, or the perception, that contract workers are more accident-prone can increase tensions between them and any permanent employees who are working alongside them. Such tensions can in themselves lead to increased risks.

5.1. Occupational safety and health and working time

Working time arrangements can have a major impact on occupational safety and health among contract workers. In Ecuador, "both the operating companies and the contractors use very strict safety and health standards. The recorded rates of accidents at work and occupational illness are not higher than those generally applying across other economic activities" (National Federation of Chambers of Industry of Ecuador, 2009 ILO survey response). In the Russian Federation, the organization of working time "is carried out in accordance with the rules of safety" (ROGWU, 2009 ILO survey response).

In Australia, "this area is a high priority to the workers and their unions". While Australian occupational safety and health regulations are reasonably good, the MUA is concerned about "the jurisdictional issues of which authority, i.e. maritime or oil and gas, cover particular sectors of the industry at particular times". For example, the regulations on both operational and occupational safety and health treat a self-propelled drilling unit or a floating production facility as a "ship", covered by the Australian Maritime Safety Authority. But when one of these "ships" drops anchor or connects to a drilling site, it becomes a "facility" covered by the National Offshore Petroleum Safety Authority, and "all of the ship-related regulations are removed, including the occupational health and safety regime". The union finds this situation "absolutely ridiculous". More broadly, the Australian trade union movement is "always pushing harder for stronger workplace health and safety representation with authority to ensure that they are respected by the employer and employees, and have the ability to carry out their legislated functions without fear of intimidation or persecution" (MUA, 2009 ILO survey response).

Occupational safety and health in Norway's offshore industry is subject to regulatory measures and close follow-up by the authorities (PSA, 2009 ILO survey response). A 2007 review of international research on offshore working hours notes that "some aspects of work schedules impact unfavourably on a wide range of health and safety outcomes". In particular, "night-shift work (especially the 7 nights/7 days rotation pattern) disrupts normal circadian rhythms, with consequent adverse effects on sleep duration and quality, on eating patterns, and on gastric and digestive problems. Poor sleep quality and accumulated sleep deficits in turn give rise to fatigue, and to impairment of subjective alertness and performance, thereby increasing the likelihood of error, and consequently the risk of accidents and injuries". While night-shift work cannot be eliminated on installations operating continuous production and drilling processes, "research findings point quite clearly to the importance of implementing shift patterns which most effectively facilitate circadian adaptation, reduce sleep disturbance, lesson performance impairment, and promote individual well-being" (Parkes, 2007). A study of United Kingdom offshore oil workers found that, although they tended to prefer a split-shift pattern of seven night shifts followed by seven day shifts, this was actually worse for their health than other shift patterns. Urine tests from men working the split-shift showed that their melatonin levels did not become synchronized with their new sleep times after shift changes. Melatonin is a naturally occurring hormone which helps to regulate body rhythms. Split-shift workers also had higher levels of fatty acids circulating in their blood after meals, pointing to higher risk of heart disease, diabetes and other metabolic disorders (BBC, 2005). Since 2007, the International Agency for Research on Cancer (IARC) has classed shift work that involves circadian disruption as "probably carcinogenic to humans" (IARC, 2007). A recent Norwegian study of shift workers in the North Sea concluded that 23.3 per cent of them were suffering from shift work disorder or SWD, a circadian rhythm disorder (Waage et al., 2009).

Long daytime working hours offshore may also cause health problems. There is "little clear or consistent evidence of cumulative fatigue across two weeks of 12-hr day shifts, although this issue cannot be regarded as resolved". However, "overtime work offshore (especially when the work week exceeded 100 hrs) was associated with shorter sleep duration and higher anxiety" (Parkes, 2007).

5.2. Safety and health performance – Operators and contractors compared

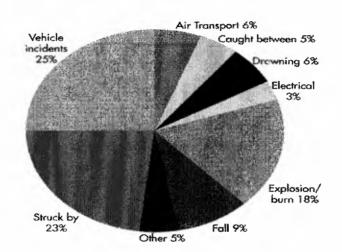
5.2.1. Upstream performance – Worldwide

In E&P, indicators of the relative and absolute safety performances of operators and contractors are collected each year by the International Association of Oil & Gas Producers (OGP). Data for 2008 were contributed by 39 major companies. Naturally, this sample does not account for all of the world's upstream operators and contractors, and any with a particularly unenviable safety record may prefer not to take part in an international reporting exercise; however, the figures may be taken as indicative of trends.

Overall, the 2008 safety trends were "mixed" (OGP, 2009a). Although the lost time injury frequency (LTIF) and total recordable injury rates (TRIR) were "the lowest on

record" (down 17 per cent and 22 per cent respectively, when compared with 2007 results, and "continuing a long-term trend for improvement"), it was clear that "the severity of incidents being reported is increasing". The main pointers to this were "a 4 per cent rise in the fatal accident rate (FAR) and the increasing number of days lost per each restricted workday case – up 16 per cent on the 2003–07 average severity". The main causes of fatalities were vehicle incidents (25 per cent) and individuals being struck by falling or moving objects (23 per cent). There were 19 deaths (18 per cent) due to explosions or burns reported. Seven of these were the result of a single incident in Nigeria, where an explosion killed seven contractor employees and injured two others during repair work on a pipeline. A total of 22 of all fatalities occurred in Africa, and 20 in the Middle East. Figure 5.1 shows the various causes of fatalities in E&P during 2008.

Figure 5.1. Causes of fatalities in E&P worldwide (excluding "unknown"), 2008



Source: OGP, 2009a.

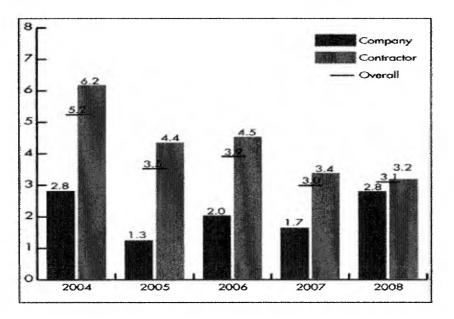
The situation may, of course, differ from one company to another, and trade unions have frequently expressed concern over the impact of contracting on fatalities in the sector. In 1996, the union-linked Brazilian research institute Dieese published figures showing a very large gap between the numbers of permanent employees and of contract workers suffering fatal accidents in the operations of the national oil company Petrobras (table 5.1). It should, however, be remembered that the proportion of contract workers in Petrobras at the time was large and growing (figure 1.2), so this could explain at least part of the discrepancy.

Table 5.1.	Numbers of permanent employees and contract workers suffering fatal accidents
	at Petrobras, Brazil

	1998	1999	2000	2001	2002	2003	2004	2005
Petrobras employees	4	1	4	12	3	3	3	0
Contract workers	22	27	14	18	18	11	14	13
Total	26	28	18	30	21	14	17	13
Source: Dieese, 2006.								

Worldwide, in 2008, the fatal accident rate per 100 million hours worked, as reported by the 39 companies, was somewhat higher for contractors (3.2) than for companies (2.8), as figure 5.2 shows. However, the gap between the rates for contractors and companies narrowed considerably between 2004–08.

Figure 5.2. Fatal accident rate in E&P worldwide per 100 million hours worked, contractors and companies, 2008



Source: OGP, 2009a.

As an indicator of safety performance, the FAR should always be treated with caution. Just one accident can cause several deaths, leading to wide fluctuations between the rates for one year and the next, or for one group and another, such as companies and contractors. While differences in the rates for companies and those for contractors do exist, the risk of fatal accidents at work in E&P appears to depend more on the type of function performed. Table 5.2 shows the big gaps between the fatality figures for the various main categories, as reported by 39 major companies worldwide.

Table 5.2. Fatalities by function in E&P worldwide, 2008

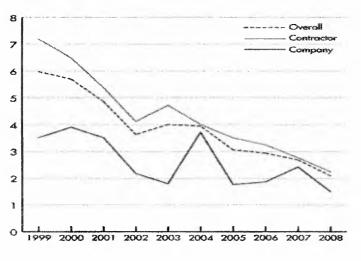
	Fatal incidents*	Fatalities		
Exploration	2	3		
Drilling	14	15		
Production	27	35		
Construction	13	15		
Unspecified	26	35		

* Incidents in which more than one job function was involved are counted in the figure for each relevant category.

Source: OGP, 2009a (adapted).

The rate for all recordable injuries (fatalities, lost workday cases, restricted workday cases and medical treatment cases) is a better gauge of general safety performance. For E&P worldwide in 2008, there were 2.08 injuries per 100 million hours worked. According to the OGP, this was "a 22 per cent improvement compared to 2007, less than half of the 1997 result, and the lowest value on record to date". The rate has been going down steadily both for contractors and for companies, but remains somewhat higher for contractors (figure 5.3).

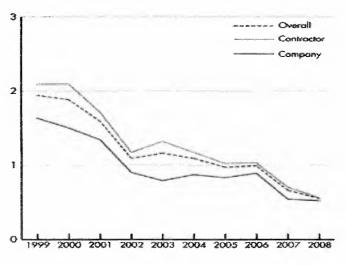
Figure 5.3. Total recordable injury rate in E&P worldwide, per 100 million hours worked, contractors and companies, 1999–2008



Source: OGP, 2009a.

The overall LTIF decreased from 0.66 in 2007 to 0.55 in 2008 (figure 5.4). The OGP describes this as "an improvement of 17 per cent compared to 2007" which "continues a long-term downward trend in the indicator". Recently, the contractors' LTIF has improved faster than the operators'. The contractors' rate was down by 20 per cent compared with 2007, while the reduction for the operators over the same period was 4 per cent. The two have almost converged, with the contractors' rate at just 8 per cent higher than the operators' rate in 2008. All in all, about 269 person-years were lost by the reporting companies and their contractors in 2008 as a result of injuries.

Figure 5.4. Lost time injury frequency in E&P worldwide, contractors and companies, 1999–2008



Source: OGP, 2009a.

Safety and health improvements are something that all sides of the offshore industry can work on together. Box 5.1 gives a best practice example of how management commitment linked to employee involvement can improve performance. Box 5.2 describes some of the very worst practices; however, even in those cases, there are some signs that persistent campaigning can start to change things for the better. Box 5.3 looks at the recommendations arising out of the Baker Panel report and the United States Chemical Safety Board findings following the 2005 explosion at the BP Texas City refinery.

Box 5.1

Management commitment drives offshore health, safety and environment performance

An Offshore Production Operation Management Team addressed the question "How can we improve and raise our health, safety and environment (HSE) performance to the next level?"

They determined that management commitment and leadership was the primary driver, generating employee involvement with shared responsibility based on open and honest communication. The result: HSE as an integral part of day-to-day business.

To accomplish this, there were a number of programme and organizational changes to be made. These included:

- highlighting HSE performance reports at quarterly employee meetings;
- management attendance at all field safety meetings;
- incident investigation reviews;
- communicating and supporting HSE initiatives and accomplishments;
- featuring HSE objectives in performance reviews for managers and supervisors;
- expectation that employees would "shut the job down" if conditions became unsafe.

Benefits

From 1998 to 2000, combined employee and contractor incident rates were reduced by 71 per cent for total recordable incidents and 100 per cent for lost time incidents.

There were also enhanced savings-profits as a result of less property damage; reduced medical expenses, compensation-insurance costs, and legal fees; fewer replacement workers; and less equipment downtime.

The company improved both its image and its reputation.

Lessons learned

This is not a quick fix-overnight exercise; progress takes years.

An integrated programme is necessary.

Senior management support for cultural change is essential for credibility and effectiveness.

Source: OGP, 2009a.

Box 5.2 Danger off Mexico's coast

"The same consortia that have rigs and good industrial practices in other oil producing countries lower their standards in the Gulf of Mexico and do not comply with international safety standards." That was the verdict from Norrie McVicar after inspecting Mexico's Campeche Basin oilfield. McVicar chairs the Offshore Task Force Group of the ITF. The group checks compliance with international standards on oil rigs in the 148 countries where the ITF has members, including Mexico. After several years' work by its inspection team, the ITF concluded that the oil industry in Mexico has some of the worst working conditions in the world, rivalled only by those in parts of the Nigerian industry.

Ake Selander, President of the International Union of Marine Engineers and an ITF officer in the United States says, "We have found that the United States companies operating in the Mexico offshore industry are responsible for bad practices that do not occur in any of the other countries where they do business. They do it because the government allows them to and because nobody is supervising them. The most negative aspect of this is that these practices are copied by all the other companies, which are always on the look-out to increase their profits".

A new book (Pérez, 2009) shows just what the oil workers of the Campeche Basin are up against. "Although in theory Pemex is 100 per cent owned by the Mexican Government, the company has been partly privatized in recent years," Pérez writes. "Currently, 80 per cent of Pemex work is carried out by workers employed by national or international private companies, most of which outsource the work to avoid their duties as employers. Working conditions are so bad that workers are often unaware of who employs them and cannot even be certain they will get paid." In short, "although Pemex, the main employer, is a state-owned company, it does not compel its contractors to comply with their employment obligations". Naming names, she details the contractors' failings: missing lifejackets, missing lifeboats, missing fire extinguishers, missing emergency exits, missing alarms, faulty health and safety routines, lack of training; oil storage tanks not emptied before welding work; workers not provided with basic personal protection gear such as non-slip footwear, gloves, goggles or overalls; divers taking turns to work in the same worn-out suits; dire living quarters and meagre rations; shifts which, in reality, sometimes continue for several hours beyond the 12. The catalogue goes on and on. "The checklists obtained for this report, documents that Pemex considers 'confidential', reveal that some rigs are not in a fit state to operate, a situation that seriously threatens the physical integrity of workers." Yet Pemex "has never rescinded a single contract of this kind, not even in cases where companies have been involved in serious accidents". And there have been plenty of those.

The workers subjected to these conditions have few means of defence. Official complaints go unheeded. When workers are recruited, they are required to sign a letter of resignation in advance. They are compelled to join "yellow" (employer-run) unions. And those who still try to stand up for their rights are blacklisted.

Source: Upstream, 2009.

5.2.2. Downstream performance – In Europe

There does not appear to be any corresponding worldwide occupational safety and health survey on safety performance in the refining sector. However, safety performance data for the downstream oil and gas industries in Europe (EU27, plus Norway, Switzerland and, in some cases, Croatia) are compiled by the Oil Companies' European Organization for Environmental and Health Protection (CONCAWE). Data for 2008 were submitted by 31 companies, accounting for over 97 per cent of the refining capacity in the EU27, Norway and Switzerland. As CONCAWE notes, the companies' willingness to share data openly in this field "indicates that they feel that safety is a non-competitive issue where all can learn from the experience of others".

CONCAWE reports that accident frequencies in the downstream oil industry in Europe are at low levels: "Overall, the 2008 performance appears slightly improved, in several areas, compared to previous years, confirming the trend observed previously". The fatal accident rate (2.0 per 100 million hours worked) and the total number of fatalities (11) decreased in 2008. Road accidents accounted for 27 per cent of the fatalities, and were also a major cause of lost time injuries. Falls from height caused one fatality in 2008, compared with 5 reported fatalities in 2007. The lost work incident frequency (LWIF) for 2008 was 1.7, down from 3.9 in 2002, and was "the lowest recorded so far".

The main 2008 safety results for company employees, contract workers and all workers in the European downstream oil industry are shown in table 5.3. Although the total hours worked by contractors were slightly less than those worked by company employees, the contractors suffered more than four times as many fatalities. On the other hand, the frequency of lost work incidents and of all recordable incidents per 100 million hours worked was slightly higher for company employees than for contractors.

Sector		Manuf	Manufacturing			Marketing			Both sectors		
Workforce		OS	СТ	AW	OS	СТ	AW	OS	СТ	AW	
Hours worked	Mh	121	130	250	160	145	305	281	274	555	
Fatalities		1	4	5	1	5	6	2	9	11	
Fatal accident rate	F/100 Mh	0.8	3.1	2.0	0.6	3.5	2.0	0.7	3.3	2.0	
Lost work incidents (LWI)	LWI	18 1	235	416	342	189	531	523	424	947	
Lost time through LWI	Days	5 537	6 074	1 1 611	8 385	1 768	10 153	13 922	7 842	21 764	

Table 5.3. Safety in the European downstream oil industry, aggregated 2008 results for all reporting companies

Sector		Manufacturing			Marketing			Both sectors		
Workforce		OS	СТ	AW	OS	СТ	AW	OS	СТ	AW
LWI frequency	LWI/Mh	1.5	1.8	1.7	2.1	1.3	1.7	1.9	1.5	1.7
LWI severity	Lost days/LWi	30.6	25.8	27.9	24.5	9.4	19.1	26.6	18.5	23.0
All recordable incidents	AI	44 2	682	1 124	648	272	920	1 090	954	2 044
All incidents frequency	Al/Mh	3.7	5.3	4.5	4.0	1.9	3.0	3.9	3.5	3.7
Distance travelled	Million km							326	678	1 004
Road accidents (RA)	RA							484	400	884
Road accident rate	RA/million km							1.5	0.6	0.88

Source: CONCAWE, 2009.

Table 5.4 compares the performance of the European downstream sector with those of the European and worldwide upstream sectors, in terms of FAR, all-injury frequency (AIF) and LWIF, for all workers. (The upstream figures provided by CONCAWE were taken from the OGP.)

Table 5.4. Comparison of downstream and upstream safety performances, 2008

Europe	
	World
4.2	3.1
3.9	2.1
1.4	0.6
	1.4

Box 5.3

Texas City refinery disaster - Worker fatigue and contract labour

On 23 March 2005, an explosion rocked the BP Texas City refinery. It was one of the most serious United States workplace disasters in two decades, resulting in 15 deaths and 180 injuries. All of those who died were contract workers. (For details of contractor employment at BP's five United States refineries, see box 1.3.)

In the aftermath of the accident, BP followed the recommendation of the United States Chemical Safety Board (CSB) and formed an independent panel to conduct a thorough review of corporate safety culture, safety management systems and corporate safety oversight at the company's United States refineries. Headed by former Secretary of State James Baker, the expert panel issued a detailed, critical report. It urged BP to involve all stakeholders, including contractors, in significantly improving process safety performance. Notably, BP should "review practices with contractors for the purpose of eliminating inappropriate inconsistencies, as compared with BP employees, for training, discipline, incentives, and communications" (Baker et al., 2007).

The CSB also issued its own report on the Texas City disaster. It found that the accident occurred during the start-up of the refinery's octane-boosting isomerization (ISOM) unit, when a distillation tower and attached blowdown drum were overfilled with highly flammable liquid hydrocarbons. Because the blowdown drum vented directly to the atmosphere, there was a geyser-like release of highly flammable liquid and vapour onto the grounds of the refinery. A diesel pick-up truck that was idling nearby ignited the vapour, setting off a series of explosions and fires that swept through the unit and the surrounding area. Fatalities and injuries occurred in and around occupied work trailers, which were placed too close to the ISOM unit and which were not evacuated prior to the start-up. The CSB team concluded that ISOM unit operators were probably fatigued when the start-up occurred. By 23 March 2005, operators had been working 12-hour shifts for 29 or more consecutive days (CSB, 2007).

One CSB recommendation was that the API and the United Steelworkers (USW), the largest United States union representing refinery workers, should work together to prepare two new safety standards for the sector: on worker fatigue and on process safety performance indicators.

Multi-stakeholder discussions on the standards were launched, but the USW pulled out of them in August 2009, amidst mutual recriminations. Among the reasons for its withdrawal, the union cited "contract labour questions inside United States refineries regarding safety". It also criticized API statistics showing that injury rates inside United States refineries are on average less than in other manufacturing sectors. The USW said that the industry drew data only on refinery workers who were directly employed by a primary energy operator, and failed to account for injuries, accidents and deaths of contract employees (ICEM, 2009b).

Regretting the USW pull-out, API said that the union was "trying to silence the voices of other stakeholders on the committee by making specific demands directly tied to their National Oil Bargaining Strategy. One example is a USW demand to write into the standard a specific numerical target for reductions in open shifts". Process safety management was "essential to the protection of employees, contractors and the communities in which API members operate" and "the industry invests significant resources to identify and correct hazards and to train our workforce on safe equipment operation, as well as proper inspection and maintenance procedures". The committees would "continue their work to finalize these two important standards. We expect them to be issued later in 2009 after which implementation will begin" (API, 2009).

On 30 October 2009, the Occupational Safety and Health Administration (OSHA) of the United States Department of Labor announced it was issuing US\$87.43 million in proposed penalties to BP Products North America Inc. for the company's failure to correct potential hazards faced by employees. The fine is the biggest in OSHA's history. It came after a six-month inspection found that BP had not met its obligations under a settlement agreement reached with OSHA in September 2005. "When BP signed the OSHA settlement from the March 2005 explosion, it agreed to take comprehensive action to protect employees", commented United States Secretary of Labor Hilda L. Solis. "Instead of living up to that commitment, BP has allowed hundreds of potential hazards to continue unabated" (OSHA, 2009).

5.3. Helicopter safety

In the oil and gas industries, the journey to and from work is statistically more hazardous than the job itself. For those in the offshore oil and gas industries, and some of those working onshore, the round trip is often made by helicopter. Trade unions have raised serious concerns over the number of helicopter accidents in the sector, and this has become a major safety issue throughout the sector because incidents often result in loss of contractors' lives.

In the first half of 2009 alone, the sector experienced several serious helicopter accidents. On 12 March, 17 people died when a Sikorsky S-92 ditched in the sea off Newfoundland. Another 16 people lost their lives when a Super Puma L2 came down off Scotland on 1 April. Two controlled emergency landings passed off without casualties: in the sea off Scotland on 18 February (a Super Puma EC-225); and on Tor, Norway, on 8 April (a Sikorsky S-92). "Helicopter-related risk accounts for a major proportion of the total risk an offshore worker is exposed to," says PSA. "These events show in all clarity the importance of maintaining a sharp focus on helicopter safety" (PSA, 2009).

Ill-fitting survival suits may have been one factor in the Newfoundland deaths, the crash inquiry heard. In a letter, the Canadian Association of Petroleum Producers said concerns about the E-452 suits, issued to offshore workers in 2007, had been raised during a 2008 survey by the manufacturer, Helly Hansen. The suits were said to be bulky and stiff, the zippers were difficult to close and the wrist seals were uncomfortably tight. Also, some of the suits leaked during training and only a limited range of sizes was available. Another concern was raised by Robert Decker, the sole survivor of the Newfoundland crash. He said the gloves attached to the survival suits were "tricky" to put on, and that his hands had been too numb to do so. In the meantime, the gloves have been redesigned and retesting has been carried out with offshore workers to ensure that their suits fit. Randell Earle, a lawyer for unionized Canadian offshore workers, suggested that the inquiry should examine how long it takes the oil industry to introduce safety improvements. In particular, he criticized delays in equipping offshore workers with a helicopter underwater escape breathing apparatus (HUEBA). "When somebody wants something done in this industry,"

he commented, "they set a very clear mandate and they set timelines for things to be done within that mandate. With the HUEBA, it was all fuzzy". (Baird, 2009).

Following the April 2009 crash off the Scottish coast, the United Kingdom oil and gas industries set up a Helicopter Task Group to address cross-industry issues around helicopter safety. Represented in the group are the companies directly involved in the fatal accident, the trade association Oil & Gas UK, the trade unions, the offshore workforce, the helicopter operating companies and the police. The group will act as a focal point for sharing information, advice and learning about helicopter accidents, and will also help implement any recommendations from the accident investigators and define possible policies and practices for implementation across the industry. It will meet at least once a month. However, it is not permanent. When its work is completed, it will be disbanded (Oil & Gas UK, 2009b).

In September 2009, a new helicopter surveillance system was launched in the United Kingdom sector of the North Sea. It enables air traffic controllers to see helicopters on their radar screens at a far greater range from the coast than had been possible with purely shore-based radars. The aim is to reduce the risk of near-miss incidents with other aircraft and increase the speed and efficiency of search and rescue operations. Through "multilateration", the system allows flight paths to be tracked all the way to an offshore installation in real time. Multilateration uses multiple position points to determine the exact location of a helicopter. Equipment is being fitted to 16 host platforms in the North Sea, which have been divided into four clusters of four platforms each. As soon as a helicopter leaves the 80-mile zone covered by shore-based radar, a transponder signal is detected by each of the four platforms in a cluster. The oil companies' data links then send the data to Aberdeen airport, where computer analysis determines the helicopter's position by means of triangulation. The four clusters were expected to be fully operational by June 2010 (Oil & Gas UK, 2009c).

Norway's Industri Energi union (IE) set up a helicopter and emergency preparedness committee in April 2009. Up to now, the rules issued by the OLF are simply recommendations on how helicopter transports on the Norwegian continental shelf should be conducted. IE believes the OLF should demand that all oil companies flying on the Norwegian continental shelf pledge to comply with the OLF regulations. Ketil Karlsen, who heads the union's health and safety work and chairs the union committee, thinks that tough competitive bidding for helicopter transport contracts may be putting safety under threat: "We in Norway tend to believe we're at the forefront of helicopter safety", he told Norwegian radio, "but this is something we're concerned about over here too". He feels the oil companies are trying to "force the helicopter industry into contracts that they don't earn money on". This could have a negative impact on safety standards (Christensen, 2009).

Worldwide figures on helicopter safety performance in the sector are compiled annually by OGP. The information is submitted voluntarily by OGP member companies and helicopter operators, but is neither verified nor reviewed for accuracy. It should be treated as unofficial, although OGP believes the data to be representative. The OGP 2009 report (OGP, 2009b) analyzes the data for 2007. The total number of flights reported in 2007 was 2.9 million, of which 58 per cent were associated with single engine helicopters and 93 per cent with offshore activity. Some 9.7 million passengers were flown, which was approximately 7 per cent more than in 2006. Some 47 per cent of the offshore flights were flown in the Gulf of Mexico, 8 per cent in the North Sea and 45 per cent in other regions. In terms of hours flown offshore, 42 per cent were flown in the Gulf of Mexico, 12 per cent in the North Sea and 47 per cent in other regions. Average offshore flight durations for the three regions are 19 minutes, 32 minutes, and 22 minutes, respectively. Nineteen helicopter accidents were reported for 2007, with 26 fatalities. There were eight fewer accidents in 2007 than there were in 2006, but the number of fatalities increased by 18 per cent. In 2007, the two worst accidents each resulted in six fatalities when the helicopters crashed into terrain-water, with one occurring during the night time.

Tables 5.5 and 5.6 give an overview of the OGP's worldwide helicopter accident statistics for 2007. They show that offshore flights were not the riskiest helicopter journeys in the oil and gas industries. Out of 26 fatalities, offshore activity accounted for 11. And of the 17 injuries, six happened offshore.

	Aircraft cate	gory		Injury classification					
Type aircraft	Number of a	ccidents		Injuries	3	Severity			
	No. accidents	No. fatal	No. eng related	Pax	Crew	Injured	Fatal		
Single engine	7	2	0	4	5	6	3		
Light twin	0	0	0	0	0	0	0		
Med. Twin	1	1	0	0	1	0	1		
Heavy twin	2	2	0	3	4	0	7		
2007 total	10	5	0	7	10	6	11		
2006 total	14	4	4	14	7	10	11		
2005 tot a l	15	3	2	22	9	23	8		
2004 total	12	6	3	25	9	9	25		
2003 tot a l	27	11	3	55	18	24	49		

Table 5.5. Worldwide offshore helicopter accident data, 2007 (plus totals for 2003–06)

Eng.-related = Engine-related; Pax = Passengers.

Source: OGP, 2009b.

Table 5.6. Helicopter accidents in the onshore and offshore oil and gas sector worldwide, 2007

			Туре	Location	Injuries		Total		
Date Activity	Model	Pax			Crew	Injuries	Fatal	Narrative	
30 Jan.	Offshore	AS332L2	HT	Malaysia	1	0	0	1	Believed to be a technical fault with hydraulic line causing fuselage fire
12 Feb.	Offshore	EC120B	SE	GoM	1	1	0	2	Hit flare boom on landing
28 Feb.	Pipelines	B212	MT	Peru	3	1	1	3	Unknown. Peruvian Air Force B212 was destroyed near Ccollpa, Ayachucho. Peru when it crashed in heavily forested terrain during a pipeline survey during daylight hours
25 Mar.	Other	M18	HT	Russi a	3	3	0	6	Adverse weather
08 May	Pipeline	AS313	SE	US	0	0	0	0	Pilot hit wires after landing in a field
11 May	Offshore	B206B	SE	GoM	0	1	1	0	Loss of tail rotor control on takeoff from helideck
05 June	Other	B206L3	SE	Colombia	3	2	3	2	Limited information, fatal recon flight
12 July	Pipeline	AS350B1	SE	Ireland	1	0	0	1	Helicopter was inspecting a gas pipeline, failure of the engine assembly gearbox spiral bevel gear resulting in loss of fuel flow

			Туре	Location	Injuries		Total		
Date Activity M	Model	Pax			Crew	Injuries	Fatal	Narrative	
14 July	Geophys	AS315B	SE	US	0	0	0	0	Power loss and hard landing while long-lining
22 July	Offshore	B206L3	SE	GoM	0	0	0	0	Helo apparently hit some solar panels attached to the safety fence and angled above the deck level (20 x 25 deck)
03 Aug.	Offshore	B412EP	MT	Nigena	0	1	0	1	Unknown, aircraft struck the ground on an unauthorized flight
12 Aug.	Offshore	B206	SE	GoM	0	1	1	0	Pilot failed to secure a sign shade inside the helicopter which was sucked out of a window and damaged the tail rotor
10 Aug.	Offshore	B407	SE	GoM	0	0	0	0	Helo struck a 2d helo parked on the helideck, 40 foot deck
11 Oct.	Offshore	EC130	SE	GoM	0	1	1	0	Tried to depart, tied down
12 Oct.	Offshore	E130	ΗT	Azerbaijan	2	4	0	6	Helo crashed shortly after takeoff on night medevac flight from a drill rig
20 Oct.	Other	B206B3	SE	US	1	1	2	0	While cleaning power line insulators, suffered power loss and hard landing
06 Nov.	Other	R44	SP	US	2	1	0	3	Hit power lines on departure at night from an oil site
13 Dec.	Other	B204	SE	Peru	3	2	5	0	Unknown crash reasons during takeoff from an oil camp, descended into tree
30 Dec.	Offshore	B206	SE	GoM	3	1	3	1	On approach to platform entered steeling with power and unable to recover, weather was below OGP VFR minima
				Totals	23	20	17	26	

HT = Heavy twin; MT = Medium twin; SE = Single engine; SP = Single piston; GoM = Gulf of Mexico; Pax = Passengers. Source: OGP, 2009b (adapted).

6. The role of social dialogue in improving conditions of work

Whether on pay, working times, health and safety, or other issues, social dialogue is crucial to the continuous improvement of working conditions, and not least for contract workers, who are often among the most vulnerable members of the industry's workforce.

Social dialogue is defined by the ILO to include all types of negotiation, consultation or simply exchange of information between, or among, representatives of governments, employers and workers, on issues of common interest relating to economic and social policy. It can exist as a tripartite process, with the government as an official party to the dialogue, or it may consist of bipartite relations only between labour and management (or trade unions and employers' organizations), with or without indirect government involvement. Social dialogue processes can be informal or institutionalised, and are often a combination of the two; it can take place at the national, regional or enterprise level; and it can be inter-professional, sectoral or a combination of these. The main goal of social dialogue is to promote consensus building and democratic involvement among the main stakeholders in the world of work. Successful social dialogue structures and processes have the potential to resolve important economic and social issues, encourage good governance, advance social and industrial peace and stability, and boost economic progress. In order for social dialogue to take place, the following must exist:

- Strong, independent workers' and employers' organizations with the technical capacity and the access to relevant information to participate in social dialogue.
- Political will and commitment to engage in social dialogue on the part of all the parties.
- Respect for the fundamental rights of freedom of association and collective bargaining.
- Appropriate institutional support.

6.1. Bipartite social dialogue

Collective bargaining is at the heart of social dialogue to improve pay and working conditions. For workers and their trade unions, the benefits of collective bargaining are obvious. From the employers' point of view, an effective bargaining process with recognized worker representatives helps to promote stability and predictability. In a continuous process sector such as oil and gas, industrial peace both upstream and downstream is a prize worth having.

Contract workers can certainly benefit from collective bargaining in the oil and gas industries, but this will depend on the scope of the agreements and the coverage of the signatories to them.

For employers, the bargaining unit is generally the company, or for some issues each workplace within that company; however, globalization has complicated the identification of this employer-side bargaining unit. Multinational oil and gas corporations tend to have national or regional cost centres, including for labour costs. They increasingly wish to "act local". For trade unions, this may pose a problem. They need to bargain with the decisionmakers in the company, but appearances can be deceptive. A done deal with a national management may be called into question by the company's real decision-making centre, which may not be in the same country. This effect may be exacerbated in the case of contract workers, whose company affiliations are not always clear in the first place.

Many oil and gas companies are members of national sectoral federations or associations. The coverage of these trade federations varies from country to country. Some have separate organizations for upstream and downstream operators and contractors. Others reach right across the sector and even further down the supply chain. In most cases, they have little or no collective bargaining role, although there are some important exceptions. The regional and international oil and gas organizations do not have a direct bargaining role, although the data that they gather can obviously have an impact on national negotiations.

One country with a detailed national collective agreement for oil and gas service companies is Norway. The current agreement runs from 2008 to 31 May 2010. It is between the NHO, the OLF and the oil service companies affiliated with them, on the one hand, and the Norwegian Confederation of Trade Unions (LO), the IE, and the union locals organizing in the companies concerned, on the other. There are 41 companies signed up to the agreement in their own right, including subsidiaries of Baker Hughes, Falck, Halliburton, Schlumberger, Securitas, Smith, Technip and Weatherford. The IE has brought a further 19 companies into the agreement (NHO/OLF/LO/IE, 2008). The coverage of the Norwegian agreement suggests that few, if any, oil and gas contractor companies are absolutely opposed to collective bargaining. Their willingness to participate depends greatly on national circumstances.

Trade union coverage of the oil and gas industries is generally structured in line with national laws and practice. In countries with a tradition of large, single-coverage industrial unions, all workers in any part of the oil and gas industries may be eligible for membership of the same union. In countries with a trade or occupational union structure, oil and gas workers will tend to be spread across a number of unions. This is because of the broad nature of the industry, which, as well as its own specific occupations, can take in those of transport, construction, metalworking and catering. The dividing line between the trade classifications may not always fall where it might be expected. In some countries, for example, workers on floating oil and gas structures are considered to be seafarers, and tend to be organized as such. Therefore, where the unions are structured on trade lines, there tend to be coordinating bodies among the various unions with membership in the oil and gas industries, and these may also have a bargaining role. This type of coordination is now mirrored at the international level, notably through a "wellhead to wheel" alliance between the ITF and the ICEM (Howard, 2005).

Another possible national structure, particularly in Asia, is company-based unions. These will generally wish to group within an industry federation, although national legislation makes this difficult in some cases. This type of union structure may affect contract workers' opportunities for membership. In Ecuador, for example, "only the workers of the state oil and gas company and its subsidiaries have trade unions and collective agreements" (National Federation of Chambers of Industry of Ecuador, 2009 ILO survey response).

In Australia, each union's coverage is defined by its union constitution. "The Maritime Union of Australia (MUA) covers Ratings, the Australian Maritime Officers Union (AMOU) covers Deck Officers, and the Australian Institute of Marine & Power Engineers (AIMPE) covers Engineers. The Australian Workers Union covers drill floor and roustabout crews and some catering positions." There are no company unions in Australia (MUA, 2009 ILO survey response).

Although it is sometimes suggested that contract workers might be more effectively organized in separate trade unions, no evidence has been found of such a tendency in the oil and gas industries. On the contrary, union organizers in the industries stress the mutual advantages to be gained from contract workers and operator employees being in the same union.

In the Norwegian oil sector, "the unions actually found it easier to organize the contract workers because they were treated worse and were more open to the unions than the permanent operators", recalls the IE union's Senior Special Adviser, Lars Myhre. "In fact, we started with the contractors, where the workforce was more proletarian ... It took 20 years. Now we have agreements with the drilling, catering, testing, diving and construction companies. Start with those who have the worst conditions, find activists, build cells, win a majority and then you can act" (Mather, 2004).

In Australia, company employees and contractors share the same agreement (MUA, 2009 ILO survey response). Sometimes, though, the two groups of workers may not immediately see things that way. Permanent employees, in particular, may not wish to associate with contract workers, whom they may regard as a threat to their jobs and their safety. In Trinidad and Tobago, the OWTU "had to carry out education programmes to bring the workers together", recalled the union's then President Errol McLeod. "The key issues for the permanent workers have been occupational safety and health standards, and for the contract workers, the lack of benefits, especially on termination." Permanent workers had "shut down operations, refusing to have non-unionized members alongside".

So the union "carried out education and campaigning among the permanent workers, so that they direct their focus to the principal companies and contractors, not the workers themselves". Occupational safety and health was chosen as one focus of this campaign. At the same time, "we put a focus on the price of labour, the whole package of wages and benefits". This is "important for organizing among contract workers, to raise awareness that they have fewer benefits and are being used by the companies" (Mather, 2004).

Boxes 6.1 and 6.2 give two examples, from Azerbaijan and the United Kingdom, of how union assistance to contractor employees in a dispute resulted in increasing the trade union's solidarity drives over contract labour issues.

As in all sectors, union bargaining strength depends on representativeness. In the oil and gas industries, trade union density (the rate of union membership) varies considerably. The MUA has a density level of 95–97 per cent in the occupations that it covers, and this has remained constant for 2000–09. For other Australian unions in the oil and gas industries, "the density is reasonably high"; however, "some employers, particularly in the drilling sector, have been pushing back for some years on a non-union individual contract arrangement" (MUA, 2009 ILO survey response). In the Russian Federation, "the proportion of union members in the total number of employees has not changed significantly" over the past decade (ROGWU, 2009 ILO survey response).

As well as bargaining on pay and conditions, dialogue between a company and a union may be about the use of contract labour. An ICEM negotiating guide on this issue shows what the unions will be looking for. They will want details of employment standards to be included in contracts for subcontracting or agency work. They will expect to discuss the viability of the contracting out and to take part in the negotiating process. This includes interviewing candidate contractors if it is decided to go ahead. The unions will also wish to receive full background information, including the contractors' or agencies' proposals and a comparison with the cost of using directly employed labour. Shortlisting of contractors or agencies should take account of their employment track record, and again the union will want to interview the shortlisted bidders. After the choice has been made, the union will be looking for the decision to be clearly communicated to all employees. It will also seek monitoring, both by the operator company and by the union itself, of the contractor's or the agency's subsequent performance, so as to ensure that the employment standards in the contract are met. It will expect the operator company to apply appropriate penalties to the contractor or agency if the standards are breached or union rights are violated. The ICEM also recommends the inclusion of a standard clause in unions' collective agreements with operators, as follows:

[Company] agrees that it will not as a general policy use contract or agency labour, except in those instances where it is agreed as unavoidable.

In the event that the company is considering employing contract or agency labour, it will – before any third party contracts are signed – consult with the unions representing workers that could be affected. The company will ensure that the union representatives are provided with all relevant facts. If the use of contract or agency labour is agreed, the company will ensure that union representatives have the right to meet any contractor or agencies who the company may wish to be considered for such contracts.

Appendix II contains the full text of trade union negotiating guidelines.

In negotiations, an understanding of trade unions' main concerns over contract and agency labour can be helpful. Both the ICEM and the IMF have sought their national affiliates' views on this. The main results of their surveys are given in box 6.3.

The contract labour issue is also covered in some of the global framework agreements (GFAs) or international framework agreements (IFAs) negotiated between individual

multinational companies and the sector-by-sector Global Union federations. In 2009, three oil and gas multinationals – Eni, Lukoil and StatoilHydro – had such agreements with the ICEM. The IMF has a GFA with Aker ASA, an industrial ownership company, which includes Aker Solutions, Aker Drilling, Aker Floating Production and Aker Exploration, all of which are wholly or partly engaged in contract work for the oil and gas industries. The agreements with Aker ASA, Eni, Lukoil and StatoilHydro each contain provisions with a bearing on contractors and contract workers. Those provisions can be found in Appendix III. GFAs typically include provisions on human rights and trade union rights; health, safety and the environment; and information, consultation and follow-up. Any extension of such provisions to contractors and contract labour is likely to promote better working conditions.

6.2. Operator–contractor dialogue

Social dialogue can also take place between companies – notably when one is a contractor to the other.

In their annual reports, the major oil and gas companies are generally keen to show progress on health, safety and environment and on business ethics. They often make it clear that they expect their contractors to share these concerns, and that they will act against any who do not. Shell, for example, reports: "In 2008, we expanded the requirements that must be included in new contracts with contractors and suppliers to include following our Code of Conduct. Requirements to follow the Business Principles and our health, safety, security and environment (HSSE) standards in the work they do for us were already in place. In many locations, we provide training to help contractors and suppliers build the systems and skills they need to comply with these principles. For example, we have a dedicated team to review and mentor contractors and suppliers in China." This team "screens suppliers and contractors and helps them understand and follow our HSSE standards". Also in 2008, Shell's annual internal questionnaire to its senior country representatives "identified that we cancelled 49 contracts due to failures to adhere to our Business Principles. Forty-five of the cases involved violations of our HSSE standards" (Shell, 2009a). If operators can bring such pressure to bear when their business principles or safety standards are breached, this suggests that they could also help to improve working conditions in general in the companies contracting to them.

Even where operators undertake to promote good pay and working conditions in their contracting companies, this does not always happen in practice. In Norway, where the main companies have made just such a commitment, "we experience exactly the opposite," says Arne Geir Mehl, one of IE's itinerant representatives on the Norwegian continental shelf. "We're constantly coming across companies and people offshore who don't have collective agreements. They have worse pay and shift patterns than they would under an agreement." It takes "real detective work to find out who these people are and which companies they're working for". "The crew manifests often list them as the operators' own employees," he says, adding that there is "a lot of social dumping of this kind on the rigs" (Theirman, 2009).

The division of legal responsibility is another topic between operators and contractors – and one which the unions also have an obvious interest in clarifying. This is sometimes resolved through formal agreements. In Norway, for example, the main operator and the contractor responsible for the operation of a mobile petroleum structure may make an agreement as to which of them is to be regarded as the principal company in terms of the regulations on safety and health, the environment, the working environment, working hours and employment protection. According to the OLF and the Norwegian Shipowners' Association, "such an agreement was widely desired among operators and contractors, partly because the organizational machinery on the structure that is most appropriate for

handling the principal company obligations normally belongs to the contractor. If no agreement is made, the operator will stand as the principal company".

They point out that the agreement can "be made as part of a drilling or similar contract, in which case the contracting parties, and the term and scope of the agreement, will be the same as in that contract". But it can also "be made as an amendment to the contract, or as a separate agreement, for example in a contract period". On 1 May 2009, they jointly approved a model agreement for use by their member companies in contracts involving mobile structures on the Norwegian continental shelf (OLF–Norwegian Shipowners' Association, 2009). This draft leaves scope for further elaboration by the parties concerned, but its core provisions already cover information exchange between contractors and operators about environmental matters: who does what in terms of checking employee qualifications, safety-awareness and equipment; the running of the working environment committee on the structure; and supervision of working hours.

The full English-language version of the Norwegian model agreement can be found in Appendix IV. It is worth noting that it assigns a large share of the responsibility for working conditions to the contractor. If this sets a precedent for other countries it could also have implications for trade unions' bargaining priorities. Unions have generally tended to prefer collective agreements that "confirm the responsibility of the principal employer over the whole workforce" (Mather, 2004); however, if the legal responsibility is more clearly shifted from the operator to the contractor, then unions in the sector will presumably feel an even greater need to bargain directly with contractor companies.

6.3. Dialogue with employment agencies

If operators can help to improve conditions for workers in the companies contracting to them, the same principle could be applied to the operators' relations with the suppliers of agency labour. This may be even more of a challenge. The major employment agencies cover a wide spread of sectors and are increasingly globalized, so one client company on its own may not have much clout.

However, there is a precedent. While no examples of formal agreements on this issue have been found in the oil and gas industries, a precedent has been set in the chemical industry. The Rhodia Group, a chemical company, and the Adecco Group, which includes Adia and describes itself as "the world market leader in human resource services", signed a joint Charter on 5 December 2007. It "provides a framework for, and defines the signatories' commitments to, progress in the conditions governing the employment of temporary staff and the code of ethics applicable to the collaboration between both groups". Rhodia, Adecco and Adia share the same values on issues such as occupational safety and health, basic employee welfare rights and conditions of employment. They have "made commitments in ten areas of responsibility that address the concerns of temporary staff regarding their professional status and welfare rights". Following a formal annual review, a report on progress will be published (Adecco-Rhodia, 2007; for the full text of the Charter, see Appendix V). Adecco is also a provider of agency labour to the oil and gas industries. This Charter between two companies is not comparable to the GFAs; however, it serves a similar objective. For example, it makes no direct reference to freedom of association and collective bargaining, neither does it refer to the core ILO Conventions. It does, however, mention that both companies are committed to the United Nations Global Compact, which in turn implies a commitment to the ILO core Conventions and the United Nations Charter on Human Rights. Perhaps the most significant element in the Rhodia-Adecco Charter is an undertaking to "provide temporary employees with working conditions that are equivalent to those enjoyed by permanent staff working for the Rhodia Group". Neither company is a stranger to agreements on labour standards. Rhodia already had a GFA with the ICEM, and, in October 2008, Adecco was one of the signatories to a Memorandum of Understanding between corporate members of the CIETT and UNI Global Union. Amongst other things, the CIETT–UNI Global Union Memorandum commits the signatories to "sectoral social dialogue at national and company level, for which collective labour bargaining is one appropriate means" (CIETT–UNI Global Union, 2008; for the full text of the Memorandum of Understanding, see Appendix VI).

6.4. Government action

Governments have a strong interest in promoting constructive social dialogue in the oil and gas industries. In oil-producing countries, the industries are generally a major contributor of income, revenue and employment to the economy. And in all countries, a stable supply of oil, gas and their derivatives is of great importance.

As well as fostering dialogue at the national level, governments can assist by applying the relevant ILO instruments. International labour standards are legal instruments drawn up by the ILO's constituents (governments, employers and workers) and they set out the basic principles and rights at work. These legal instruments are either Conventions, which are legally binding international treaties that may be ratified by member States, or Recommendations, which serve as non-binding guidelines. In many cases, a Convention lays down the basic principles to be implemented by ratifying countries, while a related Recommendation supplements the Convention by providing more detailed guidelines on how it could be applied. Recommendations can also be autonomous, i.e. not linked to any One such Recommendation Employment Convention. is the Relationship Recommendation, 2006 (No. 198). This Recommendation covers:

- the formulation and application of a national policy for reviewing at appropriate intervals and, if necessary, clarifying and adapting the scope of relevant laws and regulations, in order to guarantee effective protection for workers who perform work in the context of an employment relationship;
- the means in the form of a list of pertinent criteria to determine the existence of such a relationship, relying on the facts relating to the performance of work and the remuneration of the worker, notwithstanding how the relationship is characterized in any contrary arrangement that may have been agreed between the parties;
- the establishment of an appropriate mechanism or the use of an existing one for monitoring developments in the labour market, and the organization of work so as to be able to formulate advice on the adoption and implementation of measures concerning the employment relationship.

In addition, the Private Employment Agencies Convention, 1997 (No. 181), is based both on the recognition of the role which private employment agencies may play in a wellfunctioning labour market, and on the need to protect workers against risks of abuses. According to the Convention, each State party to the Convention has to determine the conditions governing the operation of private employment agencies. It has to:

- ensure that private employment agencies treat workers without discrimination on the basis of race, colour, sex, religion, political opinion, national extraction, social origin, or any other form of discrimination covered by national law and practice, such as age or disability;
- adopt all necessary measures, after consulting the most representative organizations of employers and workers, to provide adequate protection for, and prevent abuses of, migrant workers recruited or placed in its territory by private employment agencies;

- take measures to ensure that child labour is not used or supplied by private employment agencies;
- ensure that adequate machinery and procedures, involving as appropriate the most representative employers' and workers' organizations, exist for the investigation of complaints, alleged abuses and fraudulent practices concerning the activities of private employment agencies.

Under the Convention, private employment agencies must respect workers' privacy in relation to the processing of their personal data, and must not charge any fees or costs to workers, in any form, subject to certain exceptions permitted by the Convention.

Governments could also improve working conditions for contract workers in the oil and gas industries by improving labour inspection services at the national level. The Labour Inspection Convention, 1947 (No. 81), provides a useful guide to the common functions of labour inspection services. The Convention defines the main function of labour inspection as "to secure the enforcement of the legal provisions relating to conditions of work and the protection of workers while engaged in their work". Labour inspectors' powers of enforcement and the right to enter workplaces are set out in Article 12 of Convention No. 81. Article 15 of the Convention further specifies the duty of inspectors to be independent and impartial in the exercise of these powers. The function and duties of labour inspectors, as set out in the Convention No. 81, can be summarized as follows:

- to enforce the labour laws, related regulations and applicable national standards;
- to advise employers and workers on how best to comply with the legal framework;
- to report to supervisors on problems and defects not covered by regulations;
- to enforce or monitor collective agreements, if national law so provides.

Box 6.1 Caspian contract workers organized

The Caspian Basin is a major oil resource. Contractors active in the region include McDermott International, an engineering and construction company which specializes in energy installations. In 2005, McDermott, which was under contract to BP and the Azerbaijan state oil company SOCAR, faced a series of industrial actions by some 2,000 Azeri workers organized in the Oil and Gas Industry Workers' Trade Union of Azerbaijan (AOGWU). The dispute centred on the local workers' demand for pay and benefits parity with workers brought into the region by McDermott. Some of the outside workers were earning 50 per cent more than the Azeri workers, and were receiving better medical and other benefits.

A McDermott marine facility was briefly taken over by the workers on 22 November 2005, with news reporters in attendance. Six days later, the dispute was brought before a group of Caspian and European energy union leaders at the Caspian Sea Energy Union Leaders' Network, which was holding a seminar in the Azeri capital, Baku, at the time.

The day after the union seminar, the dispute ended when AOGWU secured a labour agreement with McDermott, including a significant pay rise. The Azeri workers were also to receive an extra month's bonus pay, a further pay increase on 30 January 2006, and medical insurance. It was agreed that a joint commission would be established by the union and employers to examine the issue of foreign workers employed in the Caspian oilfields.

The international union presence "had a big influence on this particular outcome," said AOGWU chairman Jahangir Aliyev. AOGWU announced that it would use the Caspian Sea Energy Union Leaders' Network to launch an internal working group which would monitor the labour practices of multinational companies in the region's oil and gas industries. Coordinated by ICEM, the network includes AOGWU, the Energy and Electrotechnical Industry Workers' Trade Union of Azerbaijan, ROGWU, the Energy and Electronic Workers' Trade Union of Georgia, and the Petroleum, Chemical and Rubber Workers' Trade Union of Turkey. (ICEM, 2005).

A further Azeri success was chalked up by contract workers in June 2008. Negotiations between AOGWU and Caspian Shipyards, which builds offshore rigs for the Italian-based oil multinational Agip, as well as repairing and upgrading other offshore equipment, brought wage gains and health and safety improvements for some 1,000 contract employees. Following a one-day strike by the mainly Azeri workforce, it was agreed that the contract workers would now have a legitimate workplace organization under AOGWU. The deal increased minimum wage rates from US\$140 per week to US\$300. There was also a US\$78 pay increase to offset inflation, as well as a 6 per cent rise, backdated to 1 June. Further wage talks were to be held annually, beginning in February 2009. Caspian Shipyards, which is majority-owned by Keppel FELS of Singapore, also agreed to continue a dialogue on health and safety improvements, long-term contracts, annual paid leave, and reducing the disparities between foreign and Azeri workers (ICEM, 2008b).

Box 6.2

Pay rise for United Kingdom contractor drivers after union pressure on Shell

After a four-day strike, tank-truck drivers from contractors working for Shell in the United Kingdom won a two-year, 14 per cent pay increase in June 2008. The drivers are employed by the German-based transport company Hoyer and J.W. Suckling Transport, which is wholly owned by the United Kingdom equity firm Harris Holdings. These contractor employees are represented by the British trade union Unite. The deal brought them a 9 per cent increase in 2008 and a further 5 per cent increase in 2009, meeting Unite's goal of lifting their gross pay to £36,000 per year (about US\$59,430, at the exchange rate applying on 21 November 2009). The strike had halted petrol supplies to Shell's 950 retail stations in the United Kingdom and had a severe impact on deliveries for BP, Total and Esso. Most drivers for those companies refused to cross picket lines at Shell depots and terminals. Significantly, the dispute with the contractor companies was resolved after the union put pressure on Shell, the primary operator.

Source: ICEM, 2008c.

Box 6.3 Contract labour – Union views worldwide

Two recent worldwide surveys by Global Union federations sought national unions' views on contract labour. In 2007, the IMF asked about changing employment practices and precarious work. A total of 54 affiliated unions on all continents responded. In the second half of 2008, the ICEM carried out a survey on contract and agency labour (CAL). Over 100 ICEM affiliates replied, again from all continents. Unions taking part in the surveys organize in a wide range of industrial sectors, including oil and gas. An ICEM briefing note pulled together the main results of the two polls, comparing the responses where possible.

ICEM survey: Around 88 per cent of respondents indicated that the share of CAL had increased in their sector(s) in their country during the past five years.

IMF survey: Nine out of ten respondents indicated that the share of precarious workers in their sector had increased during the past five years.

ICEM survey: Around half of the respondents indicated that CAL employment comprised less than one-fifth of the total work in their sector. Some 33 per cent said such jobs accounted for between 20 per cent and 50 per cent of their nation's sectoral workforce. Some 14 per cent said that CAL work made up more than half their respective employment in the sector.

IMF survey: One third of the unions indicated that precarious jobs comprised up to one-fifth of the workforce in their country's metalworking sector. Some 44 per cent said such jobs accounted for between one-fifth and a half of their nation's metal sector workforce. Some 13 per cent said precarious work made up more than half of respective employment in the sector.

ICEM survey: Around 78 per cent indicated that wages of CAL workers were less than for permanent employees in similar jobs. Some 20 per cent answered that wages were less than half of what permanent employees received. Some 48 per cent said that CAL workers received 50–75 per cent of permanent employee wages, and some 12 per cent said that CAL workers received 75–100 per cent of permanent workers' wages.

IMF survey: Around two-thirds of respondents indicated that wages of precarious workers were much less than for permanent workers. Among the unions replying that that was so, some one third indicated that wages of precarious workers were less than 50 per cent of those of permanent workers. A quarter of respondents said that wages of precarious workers were 50–75 per cent less those of permanent co-workers.

ICEM survey: CAL workers lived in fear of dismissal (or of other forms of harassment). Fear was seen as by far the major obstacle to union organizing of contract and agency workers (4.2 out of a total 5). Government legislation (2.8), union rules and/or structure (2.0) and opposition of existing union members (1.9) scored significantly lower.

ICEM survey: Around 83 per cent of the trade unions indicated that workers, in general, felt less secure as a result of changing employment relations.

IMF survey: Nine out of ten unions indicated workers in their country felt less secure as a result of changing employment relations.

ICEM survey: Almost nine out of ten respondents indicated that CAL workers were (where organized) mainly organized inside existing trade union structures.

IMF survey: The actions identified as most important among union strategies regarding precarious workers included first and foremost recruiting those workers into existing unions.

ICEM survey: For contract and agency labour work, the unions' top four collective bargaining objectives with companies were: "ensure trade union rights" (4.5 out of a total 5); "guarantee equal pay for similar work" (4.4); "ensure non-discrimination" (4.4); and "protect against dismissals" (4.4).

IMF survey: Survey findings indicated that collective bargaining objectives of trade union responses to precarious work existed in three groups. The top group of collective bargaining objectives included converting precarious jobs to permanent jobs, guaranteeing equal pay for similar work, and ensuring trade union rights. A second group of such objectives included ensuring non-discrimination, protection against dismissals, and reducing/limiting allowable time periods. Finally, a third-level objective for responding included training and upgrading skills.

ICEM survey: Almost half the respondents indicated that their unions had made use of labour inspection services to offset CAL abuses. In 57 per cent of the cases, the experience was positive.

Source: ICEM briefing paper.

6.5. Nationality and local content

It is sometimes said that "resource nationalism" has made it easier for multinational contractors than for multinational operators to work with countries that have a national petroleum company. That may have been true in the past, but there are signs that the contractors, too, are under growing pressure to "act local".

A rising star in the oil service industry is Petrofac, which runs facilities, trains staff and builds plant for both multinational and national operators. Petrofac is currently one of the fastest-growing FTSE 100 companies. According to a Petrofac owner, the company "recognized clients wanted to see more value-added in their own countries ... In that sense we were ahead of the trend". Oil business "goes to where the oil reserves are, and twothirds are in the Middle East. As to ethnicity, it's not about where we came from but about clients in that part of the world increasingly wanting to use a high level of local content, wanting a transfer of technology and skills, and money spent in the local economy" (Davidson, 2009).

That wish, combined with shortages of skilled workers, is a boon to local contractors, contract workers and operator employees alike. According to Dennis Smith, of contractor Nabors Industries, "In our international operations, we have schools staffed with our own instructors that train mechanics, electricians, drillers, derrickmen and roughnecks. In an area like Saudi Arabia, for example, where we employ over 2,600 people, almost 50 per cent of our workforce is composed of Saudi nationals who have been trained by our inhouse Saudi staff" (Greenberg, 2008).

Halliburton, as a worldwide contractor, expresses an onward commitment to local suppliers: "Many Halliburton customers make local sourcing and supplier diversity a contractual requirement, but we have chosen to develop supplier diversity programmes that

exceed customer requirements and expectations ... Halliburton mentors suppliers to strengthen their business acumen, and the company also builds sustainable sourcing partnerships ... In 2008, Halliburton increased expenditures with minority- and women-owned businesses, and with small and national/local content suppliers to more than US\$1.5 billion" (Halliburton, 2009b).

The operators, too, are aware of the goodwill to be had from buying local – and again, this can work to the advantage of contractors in the vicinity. Shell, for example, acknowledges that "using local contractors and suppliers and hiring local staff are particularly important ways to create local benefits and build trust". So it has "programmes to use local companies and to attract and train local staff in more than 90 per cent of the low and medium income countries where we operate. These programmes include local recruiting efforts, education and skill building programmes, and training to help local companies meet our standards and compete successfully for contracts". Shell estimates that it spent "US\$19 billion on goods and services from locally owned companies in these countries in 2008, up from US\$17 billion in 2007". As for its own employees, in 2008 "more than 90 per cent of our staff worldwide were locals" (Shell, 2009a).

Employment, therefore, may be seen a resource. But this is a double-edged sword. Especially in times of recession, outsiders "taking our jobs" can become a focus of local or national resentment. The oil and gas industries are by no means immune from this. Importation of foreign contract labour may sometimes provoke hostility.

A recent case in point was the dispute at Total's Lindsey refinery in England, which centred on the installation of a new hydrodesulphurization unit and showed how the global ramifications of contracting can meet with a very strong local response. Total, which has its headquarters in France, awarded the contract for the new unit to the California-based Jacobs group, which in turn subcontracted it to Italy's IREM after a tendering process involving five British and two other European-Union-based bidders. The contract specified that IREM would use its existing permanent Italian and Portuguese workforce to carry out the installation, scheduled for completion in 2009, which was entirely legal. Companies in the European Union are entitled to bid for contracts in any of the Member States, and there is free movement of labour throughout the European Union (with some temporary exceptions affecting the newest Member countries).

However, the IREM workers from the continent arrived in England at a sensitive time. The recession was beginning to bite, anti-immigrant political parties appeared to be gaining some ground, the Prime Minister of Britain had reportedly promised to create "British jobs for British workers", and people felt that local contractors and local workers had the skills needed for the project. In two successive disputes over the first six months of 2009, British contract workers at Total went on unofficial strike. The problem had appeared to be heading for a settlement in February through a pledge to create new temporary jobs for British workers at the site, but without affecting the employment of the Italian and Portuguese workers who had been brought over. However, it flared up again in mid-June, this time in a dispute over the lay-off of 51 workers at the refinery. The workers argued that this breached an agreement not to cut any jobs, while the company said that the lay-offs were due to the completion of the relevant part of the project. The contract workers walked out again. In response, the contractor dismissed all the workers, numbering just under 650, and told them to reapply for work. During both episodes, the disputes escalated, as maintenance and construction workers launched supporting strikes. Picket lines were also placed outside the British plants of other oil and chemical multinationals and three power stations. The dismissed workers were eventually reinstated. These cases can pose a dilemma for oil industry contractors, but also for trade unions. The sober reflection that labour mobility is a two-way street may not count for much at the time.

More fraught still are situations in which local employment worries mingle with a perception that the community is suffering the environmental impacts of the industry without reaping its economic benefits. While resentment may be rooted in direct conflicts of interest between energy companies and local communities, or in issues around the regional or ethnic sharing of wealth within a country, or a combination of both, it can pose real threats, including threats of physical violence, to expatriate contract workers in the industries. One scene of repeated serious incidents is the Niger Delta. During an industrial dispute with a subsidiary of an oil multinational in 2009, a local trade union leader emphasized that in a situation where there were ongoing discussions about empowering the youths of the Niger Delta by giving them gainful employment, the company should not "make things difficult for our people and short-change Nigerians by giving them contract jobs without a human face, especially contracts that do not involve gratuity, retirement benefits, pension schemes ...".

In September 2009, union leaders from across the sub-Saharan region called for greater security measures to be taken to protect energy workers in the Niger Delta. Meeting in Nigeria, the ICEM Sub-Sahara African Regional Organization said that the main causes of civil unrest in the Delta included "a shortage of skill-building, training, and job opportunities by multinational energy companies for people of the region; rampant use of casualization regarding labour by both local suppliers and multinationals; uneven revenue distribution; environmental degradation; and political marginalization, both at the federal level and within some states of the Niger Delta region" (ICEM, 2009c). The Nigerian trade union movement sees a strong connection between the casualization of oil industry labour and the importation of expatriate workers – allegedly in excess of the legal quotas. The country's Trade Union Congress has been calling for government action on both issues (box 1.5).

7. Summary and possible areas of action and/or research

7.1. Summary

This study has examined, in some detail, the existing conditions for contractors and contract workers in the oil and gas sector, as well as the future prospects.

Although the oil and gas sector is one of the world's higher wage payers, whether to permanent company employees or to contract workers, it has been suffering serious shortages of skilled labour. At the same time, labour costs play a relatively minor role in the end price of its products. For both those reasons, the pay rates commanded by oil and gas workers are likely to remain high; however, there are pockets of real exploitation and hardship, particularly for contract workers. Cases in Nigeria and in Mexico's Campeche Basin have been described in some detail.

Working conditions in the industries are also generally above average, although there are areas that would benefit from improvement, including unsocial hours and a lack of family-friendliness. However, the realities of exploration, production and refining may place some limits on what can be done to remedy these.

Occupational safety and health are a continuing concern for the sector's workers and employers; in particular, the gap between operators' and contractors' safety performance. On the available evidence, that gap appears to have narrowed in the upstream sector; however, no differentiated worldwide statistics have been found to provide information for the downstream sector. Employers and organized labour do not always agree on the reasons for the industries' widespread use of contracting. The operating companies see it as an element of flexibility for the sector that they are keen to preserve, particularly in uncertain times. Trade unions are concerned that contract labour could undermine pay, conditions and employment – especially when the contracting takes place across national borders – and they are also worried about its strikebreaking potential. While those differing perspectives are significant, they certainly do not rule out further dialogue and action on the issue, particularly if workers, employers and governments so wish.

7.2. Possible areas of action and/or research

- (1) To encourage exchanges of best practices in the industry, in particular for training, recruitment, and occupational health and safety.
- (2) To investigate whether there is a significant difference in accident rates for contractors and principal employers in the sector; if so, to identify causes and remedies. To collect and compile differentiated safety performance figures for the worldwide downstream industry, similar to those already produced for the upstream industry.
- (3) To examine the role of labour inspection, regulation and legislation in improving conditions for contractors and contract workers in the oil and gas industries.
- (4) To collect, evaluate and compile data, particularly in areas where this initial study has shown there to be some clear deficits. Reliable, accessible worldwide figures on wages, working time arrangements and other conditions for oil and gas contract workers are needed, whether those workers are self-employed, agency-employed or employed by service companies in the sector. This might entail some field research, but much could be achieved through a more systematic pooling of information by relevant companies and trade unions worldwide.
- (5) To collect good examples of operator-contractor agreements on legal responsibility for working conditions. It may be preferable to develop standard language for this. As an example, the full text of the Norwegian model agreement for mobile petroleum structures is given in Appendix IV.
- (6) To encourage the conclusion of international framework agreements or global framework agreements between each oil and gas company and the international trade union movement, with a clause on contract labour in those agreements. Standardized language for such a clause might offer some advantages, notably in terms of a level playing field between companies. The following draft clause (for use in the case of an operator company or of a service company that itself uses contract labour) is suggested as an initial basis for discussion:

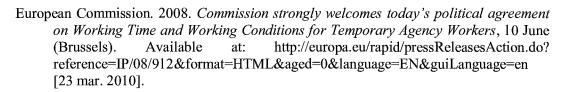
The parties to this agreement recognize that the use of contractor companies, service companies, and contract and agency labour is an important element of flexibility within the oil and gas industries worldwide. They also recognize that the industries as a whole have an interest in ensuring stable employment, high-quality training and sufficient availability of skilled labour. They therefore undertake to maintain and improve employment conditions and employment security for [Company's] directly-employed workforce, while ensuring that equally good employment conditions are enjoyed by contract workers engaged by [Company], whether individually or through contractors, service companies or agencies. Particular attention will be paid to reducing and ultimately eliminating any inequalities in conditions and benefits between [Company's] expatriate workforce and labour hired locally in the countries where the company operates. The same will apply to rates of pay where the tasks and skills requirements are similar for expatriates and for locally hired labour. While [Company] cannot take legal responsibility for its business associates, it will notify the contents of this agreement to all its contractors and service providers and will use its influence with them to help ensure that they adhere to the standards set out in this agreement. Non-compliance with those standards may ultimately result in sanctions, including possible termination of the contractual relationship. [Company] will not use hired-in personnel to undermine wages and working conditions. Where hired-in personnel are used, [Company] will ensure that they have received the necessary training to perform their tasks in a safe manner. In the event that [Company] is considering the employment of contract or agency labour, it will – before any third party contracts are signed – consult with the trade unions representatives are provided with all relevant facts. If the use of contract or agency labour is agreed, [Company] will ensure that trade union representatives have the right to meet any contractor or agency whom [Company] may wish to be considered for such contracts.

Similar language might also be considered for national agreements.

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Appendix I

ILO request for information on working conditions of contractors and subcontractors in the oil and gas industries

Research on working conditions of contractors and subcontractors in the oil and gas industry

Request for Information

Note: The Tripartite Meeting on Promoting Social Dialogue and Good Industrial Relations from Oil and Gas Exploration and Production to Oil and Gas Distribution (Geneva, 11–14 May 2009) adopted a set of Conclusions which requests the ILO to undertake research on the working conditions of contractors and subcontractors in the oil and gas industry. For the purposes of this research, the term "contractor" is defined as an individual or organization performing work for the operators, following verbal or written agreement, and the term "subcontractor" is taken to be synonymous with "contractor".

If you are unable to provide information for all the items below, please complete those for which information is available. If there is insufficient space for your replies, please add extra sheets. If you have any questions about this Request for Information, please contact the person whose name appears on the last page. Thank you for your cooperation.

1. Contract workers in the oil and gas industry - overview and employment trends

Please provide data on overall employment of contract workers, by job category and by gender, in the oil and gas industry in 2000–2009. If the data are not available, please indicate the trends in the employment of contract workers in the oil and gas industry.

What is the average length of service in the same job (or employment turnover) for (a) company employees and (b) contract workers in the oil and gas industry in 2000–2009?

How has outsourcing affected employment patterns (e.g. increased use of short-term contracts, seasonal employment etc.) in the oil and gas industry?

Please provide any other relevant information on the changing nature of the employment of contract workers in the oil and gas industry.

2. Wages, remuneration, income and costs

Please provide information on average earnings (weekly or monthly – please specify which) of (a) company employees and (b) contractors in the oil and gas industry in 2000–2009.

Have there been any significant changes in wage structures in the oil and gas sector since the year 2000? If so, please specify them and indicate if they apply to company employees, to contract workers or to all workers in the sector.

What is the average manufacturing wage and how does it compare with average wage rates in the oil and gas sector?

Please provide data on labour productivity (output/employee) and labour costs in the oil and gas industry in 2000–2009.

Are wages in the oil and gas sector linked to productivity? If so, is this link formalised (in collective agreements, pay scales or elsewhere)? Is the linkage the same in the case of company employees and of contractors?

Are wages in the sector influenced by market developments (such as the price of crude oil or natural gas)? If so, is this influence felt equally in the case of company employees and of contract workers?

Do wage levels in the sector influence the price of oil/natural gas? What proportion of costs in the sector is attributable to labour costs?

In the oil and gas industry is there any evidence of wage differentials between (a) company employees and contractors (b) unionised and non-unionised workers (c) male and female workers?

Please provide any other relevant information on wages, remuneration, incomes and costs in the oil and gas industry.

3. Collective bargaining

How has trade union density (the percentage of organized employees, excluding management personnel) changed in the industry as a whole for (a) company employees and (b) contract workers in 2000–2009 (broken down by job category and plant/facility where possible)?

Are both company employees and contractors covered by collective agreements? If so, do they share the same agreements or is there separate coverage?

Do the same trade unions organize company employees and contractors, or is there separate union coverage?

Does public policy have any specific impacts on collective bargaining in the oil and gas sector? If so, please describe them.

Please provide any other relevant information on collective bargaining in the oil and gas sector.

Please provide two copies of your collective bargaining agreements.

4. Working time

What are the current average working hours per week for: (a) company employees and (b) contractors in the oil and gas sector?

Have average weekly working hours in the sector changed over the period 2000–2009? If so, please specify.

What measures have been taken to eliminate excessive working hours and/or unsocial working hours (particularly night work) for contractors in the oil and gas industry?

What efforts are made to ensure that contractors' hours and working time patterns are compatible with domestic responsibilities, a healthy work-life balance and a generally improved lifestyle?

What efforts are made to ensure that working time arrangements in the oil and gas industry promote gender equality?

What efforts are made to adopt working time arrangements in the oil and gas sector that are most conducive to promoting contract workers' productivity?

What efforts are made to ensure that working time arrangements in the oil and gas sector contribute to achieving the highest levels of occupational health and safety among contractors in the oil and gas industry?

Please provide any other relevant information on working time arrangements for contract workers in the oil and gas industry.

Appendix II

Trade union negotiating guidelines for contracting out, outsourcing and/or agency labour

This short guide for negotiators on how to deal with contracting out, outsourcing and/or agency labour was developed by the International Federation of Chemical, Energy, Mine and General Workers' Unions (ICEM, 2008d).

Before contract and agency labour negotiations start

1. Make sure you include details on employment standards in contracts for subcontracting or agency work

Check that your company's standard request for subcontracting or agency work includes all relevant clauses from the existing collective bargaining agreement.

- (1) The work should be of the same quality and standard.
- (2) The workers' terms and conditions are the same as with the present employer.
- (3) Make sure that bidders for the contract are asked, as part of their bid, to provide a statement on how they will deal with such issues as: freedom of association – child labour – equality issues – health and safety issues – training – employment relationships – salary and working hours – pension rights – redundancy policy.
- (4) Bidders should be asked to provide examples of employment conditions, as used in their current or previous contracts. This could include information on how earlier transfers of employees to their company were done, and under which conditions.

The first objective of the trade union should be to convince the company that it may not be necessary to contract out the work. If this fails, the second phase should be, where local legislation allows it, to insist that all workers who will be working for a contractor or an agency are covered by *the same collective bargaining agreement* as the permanent employees, and are entitled to the same wages and other benefits.

The best practice is to get a clause stating that the union will be involved in subcontracting in your collective bargaining agreement - long before contract or agency labour discussions are brought to the table. The goal is to make sure that your union will be involved in all subcontracting processes.

It is easier to negotiate such a clause if the issue is not (yet) under negotiation, and it gives your union the guarantees it needs for when the problem arises.

A standard clause, as used and advocated by the *ICEM* is as follows:

"[Company] agrees that it will not as a general policy use contract or agency labour, except in those instances where it is agreed as unavoidable.

In the event that the company is considering employing contract or agency labour, it will – before any third party contracts are signed – consult with the unions representing workers that could be affected. The company will ensure that the union representatives are provided with all relevant facts. If the use of contract or agency labour is agreed, the company will ensure that union representatives have the right to meet any contractor or agencies who the company may wish to be considered for such contracts."

2. Make sure your union is involved actively in the subcontracting process

Your union should be allowed to be an integral part of any subcontracting or outsourcing process. This includes:

- (1) Having discussions on the viability of the subcontracting deal.
- (2) Being allowed to take part in the negotiating process.
- (3) If the decision is taken to contract out to another company, the union will be given the chance to interview the possible candidate subcontractors. Where agency labour is used, the union should be able to influence the decision on which agency to use.
- (4) The union needs to be able to follow and influence the negotiations.

- (5) Ask the company for the right to comment on the draft evaluation criteria to make sure that employment issues are given proper weight. For example, the company may prefer to contract out to the lowest bidder, without setting any other conditions. Unions must insist that the contractor also provides good employment conditions.
- (6) Consider nominating an independent observer to the tender evaluation panel, someone like a lawyer, accountant or someone with particular expertise relevant to the project. This will help ensure that the tendering process is transparent and ensure that all technical issues are fully understood on the trade union side.
- (7) Get agreement to meet the union members on a regular basis, during company time, and with pay, so that they are kept up to date on the negotiations and can ask questions on how the company proposals will affect them.

At the start of the labour negotiations

3. Collect and demand from your company all necessary background information

Your union will need to be given all necessary background information. This includes information on:

- (1) Why does the company want to use contract or agency labour?
- (2) Who is involved in the decision-making process inside your company?
- (3) On what available information is the decision made to contract out, or to use agency labour? ("Having the lowest bid" is not the only, nor the best, possible reason to make a choice between different tenders.)
- (4) In the case of contracting out to another company, information is needed about the contracting company, its legal status, its record of labour practices. Where do they operate? What is its know-how in the area of work it is tendering for, and what technical expertise does it have in this field?
- (5) Look, as much as possible, at the details of the planned restructuring. Which departments are concerned? What positions are affected? How many people will be outsourced? Are there any redundancy plans? What happens to the workers who stay? What are the conditions of the transfer and of the future employment? Will the same conditions apply to workers that join the workforce after the transfer? What is the timetable for the transfer?
- (6) Make sure you obtain copies of all proposals from subcontractors.
- (7) Seek regular meetings with the employer, as well as with the contractor, or labour agency, throughout the negotiating period.
- 4. Ensure that the employer provides full details of the profitability for contracting out

Check that the company's case includes:

- (1) Full comparison of costs. The company should give the union full financial information, comparing the costs of using directly employed workers with the cost of working with subcontracted or agency labour.
- (2) Make sure that one-off costs, such as redundancy payments and capital expenditure are included.
- (3) Ask which other options have been considered by the company, if any. Other options should not only include other ways of contracting out, but also ways to deal with the issue internally.
- (4) Ask how these options were assessed.

As the proposals from subcontractors come in

5. Ensure that the subcontractor's or agency's contract proposals include all relevant clauses from existing collective bargaining agreements

Ensure that each proposal contains details on:

- (1) Whether the workers will receive the same wages and conditions as they do now.
- (2) How will the subcontractor or agency deal with employment issues?
- (3) Are all of the following topics dealt with: policies on freedom of association, child labour, equality issues, health and safety issues, training, employment relationships, wages and working hours?

- (4) Your employer should also ask for details of any disputes that the candidate contractors have been involved in, within the last three years, with other companies or with trade unions, and whether there are - or have been - any court cases involving employees or former employees.
- 6. Ensure that the shortlisting of subcontractors or agencies is based on their employment track record
- (1) Make sure that the employer has taken all relevant information on the subcontractor's employment track record into account when shortlisting. For example, if the company has been known for violating national or international labour standards, they should not be considered further.
- (2) Make sure that the evaluation criteria are adhered to in your company's selection process of the subcontractor.
- (3) If you feel that the choice of contractor has ignored these employment concerns, seek an urgent meeting with the employer.
- 7. Arrange for shortlisted bidders to be interviewed by your trade union
- (1) Make sure you have the information provided by each shortlisted bidder on employment issues, as well as on general competence, and make sure you have a copy of the specifications for the subcontracting project.
- (2) Decide who will lead on behalf of the trade union.
- (3) Are there other unions involved? If so, try to form an alliance with them, so as to provide a united front against the company.
- (4) Do you want a representative of your employer to sit in at the interview? This could be useful as they can provide an independent record of what was said. It will also demonstrate that you have a working relationship with your employer.
- (5) Decide who will take the notes of the meeting.
- (6) Decide whether you want to start by giving a brief presentation about the union. Some contractors may not know much about unions.
- (7) Arrange to report back to the employer on the results of each interview; discuss your concerns and ask how the employer intends to address them.

After the decision is made

8. Ensure that the decision is clearly communicated to all employees, and that arrangements on monitoring are made

Ensure that the employer gives a full explanation of its decision to award a contract to a subcontractor or an agency. This should include an overview of estimated savings.

- (1) Ensure that, if possible, all the contract workers are organized into your union. Alternatively, contract or agency workers can also be organized in a separate union, for example, in those cases where it is legally, or practically, not possible to organize them into your own union. In those cases, make sure that your union has a good working relationship with the union that organizes the contract and agency workers, as you are likely to need their support in case of an industrial dispute. Close co-operation also avoids situations where your employer can play out one union against another, or one category of workers against another. Regular meetings between the different unions are helpful in this respect.
- (2) Ensure that you are aware of how the outsourcing company intends to monitor the arrangements made with the subcontractor or agency.
- (3) Ensure that your union also monitors the arrangements with the subcontractor and reports any problems to the main employer.
- (4) Make sure these standards and monitoring arrangements are written into contracts.
- (5) Ensure that appropriate penalties are in place for when violations of these arrangements occur, and get assurances from your company that these will be applied where needed, also in the case of trade union rights violations.

Suggested topics for interviews: 1. Timetable for the transfer; 2. Employment relationships (for example, will there be sub-subcontractors?); 3. Terms and conditions (questions about wages and benefits); 4. Equal opportunities; 5. Health and safety; 6. Recognition of the trade union, freedom of association; 7. Future staffing changes (are redundancies expected?); 8. Planned changes to working practices (working hours and management structure); 9. Training and development; 10. Pension rights; 11. Redundancy policy; 12. Will the subcontractor agree to recognize the current trade union?

Appendix III

Language on contracting in global framework agreements (GFAs) between trade unions and multinational corporations in the oil and gas sector (selected extracts)

Oil and gas operators

From StatoilHydro's agreement with Industri Energi (Norway) and the International Federation of Chemical, Energy, Mine and General Workers' Unions (ICEM) (current version signed on 13 November 2008 and valid until 1 September 2010):

StatoilHydro and Industri Energi/ICEM will meet annually to review practice in the area of the agreed principles and follow up this Agreement. The purpose shall be to discuss the issues covered by this Agreement with a view to jointly agreeing actions that will further develop good working practices. In addition to the general industrial issues and HSE-matters, the following topics may be addressed:

■ General corporate policy on employment, occupational health, safety and environmental issues within the company and, as appropriate, between the company and its related companies, including suppliers and subcontractors. [...]

From Eni's agreement with the Italian trade unions FILCEA-Cgil, FEMCA-Cisl, UILCEM-Uil and the ICEM (signed on 29 November 2002):

With regard to activities assigned to contractors, Eni shall formulate suitable guarantees against possible violations within the framework of existing contractual relations.

From Lukoil's agreement with the Russian Oil and Gas Workers Union (ROGWU) and the ICEM (signed on 12 May 2004):

The Agreement covers all activities and operations where LUKOIL has direct control. Where LUKOIL does not have overall control it will exercise its best efforts in order to secure compliance with the standards and principles set out in the Agreement. LUKOIL will notify its contractors, licensees and major suppliers of the existence of the Agreement and encourage them to comply with the standards and principles contained within it. [...]

- 5.1. LUKOIL and ICEM will meet annually to review practice and experience of the agreed principles as part of the follow-up to this Agreement. The purpose shall be to discuss the issues covered by the Agreement with a view to agreeing joint actions that will further develop good working practices. In addition to general industrial issues and health, safety and environmental matters, the following topics may be addressed:
 - 5.I.I. General corporate policy on employment, occupational health, safety and environmental issues and challenges affecting those within the LUKOIL Group and, as appropriate, between LUKOIL and its related companies, including suppliers and subcontractors; [...]

Contractors to the oil and gas industry

From Aker ASA's agreement with Fellesforbundet and the International Metalworkers' Federation (signed on 28 October 2008 and initially valid for two years):

While Aker ASA cannot take legal responsibility for its subsidiaries and other third party business associates, Aker ASA will notify the companies concerned of this Agreement and use its influence also with them in order that they adhere to the standards set out in this Agreement.

Non-compliance with these standards will ultimately result in sanctions and potential termination of contractual relationship. [...]

Aker recognizes that its employees are key to its success. Aker is therefore committed to ensuring that both permanent employees, part-time employees and hired-in personnel are treated fairly. Aker recognizes that permanent employment is preferable to both parties, and will not use hired-in personnel, part-time and temporary employment to undermine wages and working conditions.

The parties acknowledge that hired-in, part-time and temporary workers occasionally are necessary, and that effective use of such allows Aker to adapt quickly to changing conditions, thereby increasing job security and predictability and permanent employment.

Where hired-in personnel, part-time and temporary employees are used they will receive the necessary training to carry out their function in a safe manner.

Aker ASA is an industrial ownership company. Its companies include Aker Solutions, Aker Drilling, Aker Floating Production and Aker Exploration.

Appendix IV

Model agreement on the division of responsibilities between operator and contractor companies on mobile petroleum structures on the Norwegian continental shelf

The following model agreement relating to principal company responsibility etc. on mobile structures in petroleum operations has been drawn up by the Norwegian Oil Industry Association (OLF) and the Norwegian Shipowners' Association under reference to section 2-2, nr 2 of the Working Environment Act (Norway), section 44 of Royal Decree 31.08.01.

Agreement relating to principal company responsibility, etc. on mobile structures in petroleum operations

1. Contracting parties x)

This agreement is made (if applicable: as an amendment to the main contract) between the operator company and the main contractor who is responsible for operating the mobile structure

The agreement applies for as long as the mobile structure is engaged by the operator pursuant to contract of

^{x)} This clause may be omitted if the agreement is incorporated in the main contract and the contracting parties and the term and scope are the same as in that contract.

2. Principal company

The main contractor is the principal company for the purposes of section 44 of the Regulations of 31.08.01 relating to worker protection and the working environment in petroleum operations, cf. section 2.2 of The Working Environment Act of June 17 2005 No. 62.

3. Responsibility

Principal company responsibility follows from the statutory rules mentioned in clause 2 above.

The responsibilities borne by the operator and the main contractor in their capacity as employers, operators, contractors etc. also flow from the Working Environment Act and the Petroleum Act (Act No. 29.11.96 nr 72) and the pertinent regulations, and this agreement does not restrict these responsibilities.

This agreement shall apply whenever not otherwise agreed in writing between the parties.

4. Duty to provide information

The main contractor shall inform the operator of all matters of material significance for the working environment and that are necessary in relation to the internal supervision required of licensees under the working environment legislation.

The operator is responsible for informing his other contractors and their subcontractors on the mobile structure (joint contractors) of the contents of this agreement concerning principal company responsibility.

The main contractor shall co-ordinate contact with the Petroleum Safety Authority (PSA) in all matters that come under the main contractor's area of responsibility in regard to working environment legislation.

In matters of material significance, the operator shall be kept informed by copies of correspondence and communications to the PSA.

5. Employees and equipment etc.

The operator shall ensure that those of his own employees and the employees of joint contractors engaged by the operator, who are sent on board the structure, possess satisfactory qualifications. The main contractor is responsible and shall ensure that everyone who arrives on the structure gets satisfactory safety and emergency preparedness training on board, whether they are employed by the operator or the main contractor. By agreement with the operator, the main

contractor may send an employee ashore from the structure if the main contractor finds that the employee does not possess satisfactory qualifications.

The main contractor has similar responsibility for his own employees and the employees of joint contractors engaged by him.

The operator shall ensure that equipment, goods and consumable materials taken aboard the structure that belong to the operator or joint contractors engaged by him, satisfy the requirements of the working environment legislation and other authorities. The main contractor may demand modification or replacement of equipment etc. that does not satisfy said requirements.

Similarly, the main contractor is responsible for such equipment, goods and consumable materials belonging to him or joint contractors engaged by him.

6. Working Environment Committee

The main contractor is responsible for co-ordinating safety and working environment operations on the structure and shall establish a "joint local working environment committee". The working environment committee shall send its action plan and annual report to the PSA when so requested, with a copy to the operator.

7. Working hours

The main contractor shall exercise supervision to ensure that the individual employees on the structure work in accordance with the existing rules regarding working hours. However the main contractor is not responsible for any excess working time on the part of employees of the operator or joint contractors when that is due to incomplete or incorrect reporting of work that is not performed on board the structure.

Whenever so requested, the main contractor shall send the PSA the plan for working time arrangements on board the structure, with a copy to the operator.

The main contractor shall ensure that each employer on the structure submits monthly statements of working time arrangements and periods on board for their own employees. These statements shall be prepared in accordance with the legislation and shall be available to the operator.

8. Other working environment matters

The main contractor shall ensure that the following matters are observed on the structure:

- Charting the working environment and promoting measures
- Establishing routes for good co-ordination between employers on the structure
- Ensuring that safety and health services have the necessary information concerning the working situation
- Ensuring that all employees are given the necessary information so that injuries and occupation-related diseases can be prevented
- Ensuring that employees are given information concerning risks and health hazards when handling chemicals.

9. Miscellaneous

(Any supplementary rules desired or needed by the parties can be inserted here. It is recommended that consideration be given to whether the main contract provides an adequate solution for the financial liability and inter-company accounts the agreement may entail, whether the "knock-for-knock principle" covers the division of responsibility and work under this additional agreement, for example in regard to relations between the principal company and the joint contractors.)

Appendix V

Charter between Rhodia Group and Adecco Group

Rhodia Group and Adecco Group¹

Charter of Commitment in Favour of Socially Responsible Collaboration

The **RHODIA Group** has been pursuing a rigorous policy in the area of health, safety and environmental protection for more than 20 years. This policy, which is reinforced at regular intervals, represents the underlying foundation for the Group's commitment to sustainable development.

The Rhodia Way approach, which comprises a new stage in this commitment, is based on a responsibility reference framework structured around different stakeholders and forms an integral part of the Group's managerial processes.

This reference framework defines the responsibilities set by Rhodia toward its customers, suppliers, employees, investors, local communities and the environment.

Applicable throughout the world, the Rhodia Way calls upon the Group's different entities to conduct annual self assessment of their practices and to define their targets for progress while simultaneously pursuing a dialogue with their different stakeholders.

The ADECCO Group is convinced that temporary employment can constitute a positive step in the development of an individual's professional career. Accordingly, for the past twenty years, it has been committed to socially responsible activities designed to develop the social status of temporary employees, the training of temporary staff, health and safety in the workplace, the struggle against all forms of discrimination and the fight against social exclusion.

Within the framework of its sustainable development policy, the Adecco Group publishes a report on the policies and resources committed to this area and the results achieved, which it circulates to all its stakeholders. In this respect, making sustainable development a general attitude shared by its different stakeholders represents one of the strategic objectives pursued by the Adecco Group, particularly within the framework of the provision of human resources services to its different customers.

The RHODIA Group and the ADECCO Group consequently share the same values on issues such as health and safety in the workplace, fundamental employee welfare rights or conditions of employment. They have made a public commitment to promoting these values notably within the framework of the UN Global Compact or the Diversity Charter. For many years, they have been engaged in a high quality working relationship founded on mutual trust.

The aim of the present charter is to achieve, above and beyond any commercial agreements between the two groups, the following objectives:

- To define the framework and commitments for progress shared by the signatories in favour of:
 - the employment conditions of temporary staff;
 - the overall quality of their collaboration;
 - the code of ethics applicable to the relationship developed together.
- To lay down guidelines for collaboration between the signatories making it possible:
 - to facilitate and promote the inclusion of employee welfare and environmental concerns in their collaboration;
 - to prevent and reduce risks inherent in their collaboration;
 - to respect the commitments made, and to publish an objective annual report on progress achieved.

¹ The "Adecco Group" is comprised of the subsidiaries of Adecco SA present in France operating under the Adecco and Adia brand names, as well as the network of temporary employment integration companies associated with the Group.

The commitments for progress between the RHODIA Group and the ADECCO Group:

Commitment No. 1: Ensure compliance with labour laws and fundamental employee welfare rights:

The signatories undertake to comply with the different labour laws currently in force governing the employment of temporary staff as applicable to each company's activities.

They also undertake to protect temporary staff against all attempts to compromise their fundamental welfare rights.

Commitment No. 2: Improve working conditions and prevent risks in the workplace:

The signatories undertake to provide temporary employees with working conditions that are equivalent to those enjoyed by permanent staff working for the Rhodia Group.

Particular attention will be paid to providing them with all necessary information in view of the specific risks related to the Group's industrial activities.

Commitment No. 3: Develop employability:

The signatories undertake to ensure that the temporary work assignments carried out within the Rhodia Group represent, for temporary staff, a positive stage in the development of their professional careers.

Commitment No. 4: Inform employees about, and facilitate access to, welfare benefits:

The signatories undertake to bring to the attention of the temporary employees the welfare benefits available to them, whether provided by either of the signatories or by the temporary employment industry in general.

Commitment No. 5: Combat discrimination and promote diversity:

The signatories undertake to adopt recruitment practices strictly based on criteria related to professional skills.

They may also decide to adopt initiatives promoting diversity in the labour force.

Commitment No. 6: Take joint action in favour of the professional integration of disabled workers:

As disability is not an obstacle to the development of professional skills, the signatories undertake, whenever possible, to pool their resources with a view to increasing the professional integration of disabled workers.

Commitment No. 7: Take joint action to promote the professional integration of individuals excluded from the world of work:

The signatories acknowledge that certain social categories face difficulties in attempting to gain access to employment.

They want, as far as possible, ² to help provide information for, and promote the professional integration and training of, these individuals notably by working through the network of temporary employment integration companies associated with the Adecco Group.

Commitment No. 8: Promote management/employee dialogue and a greater awareness of social and professional demands:

The signatories undertake to proceed with an annual appraisal of the satisfaction of temporary employees and of the entities for which they work.

They also undertake to inform unions and management about the deployment of this charter.

Commitment No. 9: Support and update this charter:

The signatories undertake to appoint in their respective organizations an officer responsible for the deployment of this charter and for appraising its impact. They undertake to proceed, if necessary, with any changes in the scope of its provisions.

In the event that a problem should arise in the fulfilment of the commitments included in this charter, the signatories agree to resolve any such difficulty by consultation between the officers

² This possibility depends, in particular, on the existence of a temporary employment integration company (ETTI) associated to the Adecco Group in the vicinity of the Rhodia Group entities concerned by this charter of commitment.

referred to in the previous paragraph, leading to the adoption of a solution that respects the rights of the employees concerned.

Commitment No. 10: Appraise and report on progress achieved:

The signatories undertake to set up a formal reporting system designed for this charter based on jointly defined monitoring indicators.

They also undertake to publish information (both within and outside their respective organizations) in a concerted manner regarding any obstacles encountered, and successes achieved, in the implementation of these commitments.

Paris, 5 December 2007.

The signatories:

For the RHODIA Group Jean-Pierre Clamadieu Chief Executive Officer **For the ADECCO Group** François Davy Chairman and CEO

Appendix VI

Memorandum of Understanding between corporate members of the International Confederation of Private Employment Agencies (CIETT) and UNI Global Union

Goals and purpose

This Memorandum of Understanding (MoU) aims at creating a partnership between UN1 Global Union¹ and Ciett Corporate Members² in order to achieve fair conditions for the temporary agency work industry and temporary agency workers through global social dialogue.

The signatories to this MoU recognize:

- That the ILO Convention 181 on private employment agencies and its accompanying Recommendation 188 provide a framework that allows for the improved functioning of private employment agencies;
- The ILO Declaration on Fundamental Principles and Rights at Work, namely freedom of association and the effective recognition of the right to collective bargaining, the elimination of all forms of forced or compulsory labour, the effective abolition of child labour, and the elimination of discrimination in respect of employment and occupation as a means to ensure decent working conditions for temporary agency workers;
- That temporary agency work contributes to improve the functioning of labour markets and fulfils specific needs for both companies and workers and aims at complementing other forms of employment;
- The need for further discussion and elaboration on a large number of issues. They shall seek to develop joint actions falling within the framework of their respective areas of responsibility.
- 1. UNI and Ciett Corporate Members recognize that temporary agency work can, to different degrees, contribute to:
- Facilitating fluctuations in the labour market, e.g. the matching of supply and demand.
- Implementing active labour market policies and creating pathways between unemployment and employment by:
 - Helping jobseekers entering or re-entering the labour market.
 - Helping disadvantaged people entering into the labour market.
 - Providing more work opportunities for more people.
- Facilitating the transition between education and work, e.g. by providing students and young workers with their first access to professional life and an opportunity to gain work experience.
- Facilitating the transition between assignments and jobs by providing agency workers with vocational training.
- Promoting conversion between different types of work contracts, e.g. by assisting in a transition from a temporary agency contract to fixed-term or open-ended contracts.
- Improving life work balance, e.g. by providing flexible working time arrangements such as part-time work and flexible working hours.
- Helping fight undeclared work.

¹ UNI Global Union industries covered by the agreement: Agency Staff, Commerce, Electricity, Finance Gaming, Hair&Beauty, Graphical, IT&Business Services, Media&Entertainment, Postal, Property Services, Social Insurance, Telecom.

² Ciett Corporate Members Committee : Adecco, Kelly Services, Manpower, Olympia Flexgroup AG, Randstad, USG People.

- 2. UNI and Ciett Corporate Members agree that an appropriate regulatory framework for the operation of temporary work agencies needs to:
- Guarantee that temporary work agencies do not compete to the detriment of workers' rights and working conditions.
- Clarify the role, obligations and rights of the temporary work agency as the employer of the temporary agency workers.
- Combine adequate protection, decent working and employment conditions for temporary agency workers and proper conditions for the operation of temporary work agencies in a well functioning labour market.
- Ensure that legislation regulating the use of temporary agency work is proportionate, nondiscriminatory and objective; promotes decent forms of temporary agency work and effectively prevents potential abuses, such as undermining of employment conditions of workers.
- Promote quality standards within the industry and prevent unfair competition by fraudulent agencies and/or user companies, counter abuses and illegal practices and fight human trafficking.
- 3. UNI and Ciett Corporate Members agree that a regulatory framework on temporary agency work must include and promote:
- Principles as guaranteed by ILO Convention 181 and Recommendation 188 on private employment agencies, with a particular focus on the implementation of the no-fee charging rule for jobseckers for temporary assignments and permanent placement services provided by the temporary work agency.
- Fair treatment for temporary agency workers with regard to their basic working and employment conditions based on the principle of non-discrimination (for instance, equitable, objective and transparent principles for the calculation of agency workers' wages and benefits, considering national legislation and practices).
- Respect for freedom of association and the right to collective bargaining as guaranteed by ILO conventions 87 and 98.
- Sectoral social dialogue at national and company level for which collective labour bargaining is one appropriate means.
- Prohibition of the replacement of striking workers by temporary agency workers without prejudice to national legislation or practices.
- Attention to and clarity of benefits (i.e. salary, social insurance, pension, vocational training).

4. Actions to be taken jointly by the signatories

On national level:

- Identify and review obstacles of a legal or administrative nature which may limit the opportunities for temporary agency work to operate, and, where appropriate, work with the national governments to eliminate them.
- Review the need for systems of licensing and inspection and when relevant, work with the national governments for the introduction of such systems (which can include financial guarantees), which will contribute to the development of good industry standards, provided that such systems are proportional, non discriminatory and objective and do not aim at hampering the development of temporary agency work.
- Work with the national governments to provide adequate and continuous social protection for temporary agency workers as well as subsistence payments provided for by safety nets after assignments.
- Promote sectoral social dialogue as the appropriate platform to negotiate working conditions of temporary agency workers as well as the conditions of use of temporary agency work.

On global level:

- Work with the ILO to promote ratification of ILO Convention 181 and the application of Recommendation 188.
- Cooperate with the ILO, IOM and other organisations to promote international instruments and actions to eliminate human trafficking (e.g. promotion of ratification and effective

implementation of relevant ILO Conventions on forced labour and migration, Athens Ethical Principles, UN.GIFT).

- Continue to research the industry and further elaborate on perceptions and conditions for both workers and employers (e.g. on job creation, precarious work etc.).
- Promote the establishment of a global sectoral dialogue forum on temporary agency work.
- 5. Implementation of this Memorandum of Understanding
- UNI and Ciett Corporate Members commit to publicize this Memorandum of Understanding throughout their membership and corporate structures respectively.
- In order to assess implementation and address any disputes which may arise concerning the application of this Memorandum of Understanding, UNI and Ciett Corporate Members will meet twice yearly. This meeting will amongst other things review mutual respect for and implementation of this Memorandum of Understanding.
- The secretariats of both organizations will maintain ongoing communications between those meetings.

San Diego, 24 October 2008.

Philip J. Jennings General Secretary UNI global union Leo Houwen Chair **Ciett Corp. Members Committee**

Dieter Scheiff CEO Adecco

Jeff Joerres CEO Manpower Marcel Slaghekke CEO **Olympia Flexgroup AG**

Ben Noteboom CEO **Randstad** Carl Camden President and CEO Kelly Services

Ron Icke CEO **USG People**

Sectoral working papers ¹

	Year	Reference
The Warp and the Web Organized production and unorganized producers in the informal food-processing industry: Case studies of bakeries, savouries' establishments and fish processing in the city of Mumbai (Bombay) (Ritu Dewan)	2000	WP.156
Employment and poverty in Sri Lanka: Long-term perspectives (Vali Jamal)	2000	WP.157
Recruitment of educational personnel (Wouter Brandt and Rita Rymenans)	2000	WP.158
L'industrie du textile-habillement au Maroc: Les besoins des chefs d'entreprise et les conditions de travail des femmes dans les PME (Riad Meddeb)	2000	WP.159
L'évolution de la condition des personnels enseignants de l'enseignement supérieur (Thierry Chevaillier)	2000	WP.160
The changing conditions of higher education teaching personnel (Thierry Chevaillier)	2000	WP.161
Working time arrangements in the Australian mining industry: Trends and implications with particular reference to occupational health and safety (Kathryn Heiler, Richard Pickersgill, Chris Briggs)	2000	WP.162
Public participation in forestry in Europe and North America: Report of the Team of Specialists on Participation in Forestry	2000	WP.163
Decentralization and privatization in municipal services: The case of health services (Stephen Bach)	2000	WP.164
Social dialogue in postal services in Asia and the Pacific: Final report of the ILO–UPU Joint Regional Seminar, Bangkok, 23–26 May 2000 (edited by John Myers)	2000	WP.165
Democratic regulation: A guide to the control of privatized public services through social dialogue (G. Palast, J. Oppenheim, T. McGregor)	2000	WP.166
Worker safety in the shipbreaking industries: An issues paper (Sectoral Activities Department and InFocus Programme on Safety and Health at Work and the Environment)	2001	WP.167
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¹ Working Papers Nos 1–50 are not included on this list for reasons of space, but may be requested from the Sectoral Activities Department.

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