

**SECTORAL ACTIVITIES PROGRAMME**

**Working Paper**

**The impact of 11 September 2001 on the civil aviation industry:  
Social and labour effects**

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

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## Foreword

In response to the crisis resulting from the 11 September 2001 events, the Director-General of the International Labour Office convened a Think Tank on the Impact of the 11 September Events for Civil Aviation, which was held in Geneva on 29 and 30 October 2001. It brought together Government, Employer and Worker experts, as well as independent and industry experts from the civil aviation industry, for two days of intensive discussions on the impact the crisis was having on the industry. The Think Tank agreed upon a number of recommendations for further work by the ILO in preparation for the meeting on civil aviation scheduled for January 2002.

In November 2001, the Governing Body of the International Labour Office decided to change the purpose and the title of the Meeting to “Tripartite Meeting on Civil Aviation: Social and Safety Consequences of the Crisis Subsequent to 11 September 2001”. It also asked the Office to prepare an Issues Paper that would serve as the basis for the discussions at that Meeting. For the preparation of this paper, the ILO Sectoral Activities Department commissioned several studies as recommended by the Think Tank.

The present working paper by Peter Turnbull and Geraint Harvey on “The impact of 11 September on the civil aviation industry: Social and labour effects” is one of the studies that have been taken into consideration for the ILO paper. One of the interesting aspects of the paper is that it includes the results of a global questionnaire survey of trade union officials worldwide. The paper reviews the relationships between management and workers in the industry so as to better understand their responses to the present crisis. It describes the varied responses to the 11 September events and gives examples of innovative and socially responsible practices. The next section presents the main results of the survey. The paper finally considers the differential impact of the crisis on men and women and minorities.

As a sectoral working paper, the study is meant as a preliminary document and circulated to stimulate discussion and to obtain comments. Earlier drafts of the paper were intensively discussed at the ILO; the opinions expressed are nevertheless those of the authors and not necessarily those of the ILO.

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## 1. Introduction

This study was initiated by the ILO Think Tank on the Impact of the 11 September Events for Civil Aviation (Geneva, 29-30 October 2001). Amongst other conclusions, the Think Tank recommended that the ILO:

- (a) collect information on best practices and innovative and socially responsible ways to respond to the crisis, and disseminate this information to its constituents; and
- (b) undertake studies on the differential impact of the crisis on men and women and minorities.<sup>1</sup>

This research paper, which addresses these two issues, is based on an extensive search of secondary materials, telephone interviews with managers, union officials and other representative organizations involved in the civil aviation industry, and a global questionnaire survey of trade union officials (a copy of the questionnaire is appended to the paper. Thirty-five unions responded to the questionnaire, including trade unions from North America (5), Europe (20), Latin America (2), Asia-Pacific (6) and Africa and the Middle East (2). Respondents included four specialist pilot unions as well as several unions representing air traffic controllers.

Given the limited time available, the survey response compares reasonably well with a previous study of civil aviation unions undertaken by Cardiff Business School in 1997.<sup>2</sup> However, the results of the present study should be regarded as indicative of recent developments in the civil aviation industry, rather than representative.

There is a long history of difficult relationships between management and workers in many airlines and other civil aviation companies. Thus, the response of both management and labour to the present crisis must first be set in context. This is the purpose of section 2.

Section 3 discusses the varied responses of different airlines and other civil aviation companies to the events of 11 September. Examples of “best practice” and other “innovative and socially responsible” ways to respond to the crisis are presented in this section.

Section 4 presents the main results of the questionnaire survey as well as more detailed case study research based on secondary and interview data. The question of “preferred approaches” to cost reduction is addressed, as well as the response that unions would like national governments and international agencies to adopt.

The differential impact of the crisis on men and women and minorities is considered in section 5.

<sup>1</sup> ILO (2001) *Report of the Director-General, Sixth Supplementary Report: Think Tank on the Impact of the 11 September Events for Civil Aviation*, GB.282/14/6, 282nd Session, Geneva: International Labour Office.

<sup>2</sup> Blyton, P., Martknez Lucio, M., McGurk, J. and Turnbull, P. (2001) “Globalization and Trade Union Strategy: Industrial Restructuring and Human Resource Management in the International Civil Aviation Industry”, in *International Journal of Human Resource Management*, 12(3): 445-63.

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## 2. Labour relations in the civil aviation industry

Labour relations have always played an important part in the competitive performance of airlines and other companies in the civil aviation industry. Historically, strikes and other forms of industrial conflict have attracted a great deal of adverse attention, no doubt because of their visibility and the immediate impact of any work stoppages on passengers and revenue. The three-day strike by *British Airways (BA)* cabin crew in 1997, for example, is estimated to have cost the airline £125 million in lost revenue. The dispute also led to a deterioration in employee morale, job satisfaction and, as a result, a decline in customer satisfaction.<sup>3</sup>

Likewise, there is clear evidence that labour conflict in the United States is negatively associated with airlines' service quality, productivity and various financial outcomes.<sup>4</sup> However, the most important influences on airline performance are the more mundane issues of work organization such as work rules, employee attitudes, the level and structure of labour costs, and the effects of these variables on productivity and service quality.<sup>5</sup>

These issues have assumed even greater importance in recent years. In an industry where both domestic and international competition have intensified markedly as a result of deregulation, liberalization, and the commercialization or full privatization of many airlines, labour assumes an ever more prominent role in the competitive strategies of carriers seeking to reduce fares and maintain or improve service quality.

Teamworking, customer care and quality control programmes are now commonplace throughout the industry, and many airlines have invested heavily in new human resource management policies.<sup>6</sup> To quote Sir Colin Marshall of *British Airways (BA)*, In an industry like ours, where there are no production lines, people are the most important asset and everything depends on how they work as part of the team. This means that, to get the best results, managers have to care about how they [the employees] live and function, not just about how they work and produce.<sup>7</sup>

There are some indications that management-labour relations have improved in recent years. In the United States, for example, strike activity declined significantly in the late 1980s and 1990s.<sup>8</sup>

<sup>3</sup> Lebrecht, D. (1999). Effects on Airline Employees of Growing Competition, Airline Industrial Relations Conference, SMi Group, 25-6 October, London.

<sup>4</sup> Hoffer Gittell, J., von Nordenflycht, A. and Kochan, T.A. (2001). Mutual Gains or Zero Sum? Labor Relations and Stakeholder Outcomes in the Airline Industry, Harvard Business School, USA.

<sup>5</sup> Cappelli, P. (1995). *Airline Labor Relations in the Global Era: The New Frontier*, Ithaca: ILR Press.

<sup>6</sup> Blyton et al (2001). Op. cit., p.456.

<sup>7</sup> *Financial Times*, 1994.

<sup>8</sup> For a discussion of labour relations and industrial disputes in the European civil aviation industry, see Blyton, P. and Turnbull, P. (1995). Growing Turbulence in the European Airline Industry, *European Industrial Relations Review*, (255): 14-16; and Gall, G. (1996). Converging on Conflict, *European Journal of Industrial Relations*, 2(2): 255-60.

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Other indicators of management-employee relations, however, suggest a rather different picture. Measures of “bargaining efficiency” in the United States, for example, indicate a significant rise in the time taken to negotiate new or revised collective labour agreements. Based on data for the ten major US carriers, the average duration of contract negotiations is now over 17 months, with US Airways recording a figure of almost two years and America West 30 months.<sup>9</sup>

It is now not uncommon for airlines in many countries around the world to impose, rather than negotiate, changes to working time, the introduction of performance-related pay or pay for new entrants, the regrading or cross-utilization of staff, and teamworking.<sup>10</sup> Evidence from the United States, however, indicates that “hard bargaining” and union avoidance strategies are not very successful.<sup>11</sup> In fact, one of the main conclusions of the Massachusetts Institute of Technology (MIT) Global Airline Industry Research Programme is that “attempts to reduce labour’s bargaining power are likely to lead to negative, if not disastrous, results”.<sup>12</sup>

On a global scale, more than two-thirds of civil aviation unions recently reported a deterioration in management-labour relations.<sup>13</sup> In particular, cabin and flight crew were more likely to indicate worsening employment relations.<sup>14</sup> For many airline employees, this is a direct result of declining working conditions and quality of working life. A recent survey of 926 cabin crew in the United Kingdom, for example, concluded that a “potentially lethal combination is generated by poor-quality physical working conditions, a stressful and demanding (physically and emotionally) role, and punishing work schedules”.<sup>15</sup>

These problems can only be fully appreciated in relation to three important features of the civil aviation industry. These features, in turn, are crucial to any assessment of the events of 11 September and any evaluation of the appropriateness of different responses to the crisis.

First, the industry’s product is perishable and airlines have no real inventory. Thus, if flights are cancelled, airlines cannot “stockpile” or easily recover lost traffic in the

<sup>9</sup> “Duration” is defined as the number of months to elapse between the amendable date of the previous contract and the ratification of the contract being negotiated. See MIT Global Airline Industry Programme (2001). Average Length of Negotiations for Airline Labor Contracts, Massachusetts Institute of Technology, USA.

<sup>10</sup> Blyton, P., Martinez Lucio, M., McGurk, J. and Turnbull, P. (1998a). *Contesting Globalisation: Airline Restructuring, Labour Flexibility and Trade Union Strategies*, London: ITF, p.19.

<sup>11</sup> Hoffer Gittell et al, op.cit.

<sup>12</sup> von Nordenflycht, A. (2001). *Alternative Approaches to Airline Labor Relations*, Massachusetts Institute of Technology, USA.

<sup>13</sup> Blyton et al. (2001). Op. cit., p.453.

<sup>14</sup> *ibid.* See also Blyton, P., Martinez Lucio, M., McGurk, J. and Turnbull, P. (1998b). *Globalisation, Deregulation and Flexibility on the Flight Deck*, report prepared for the European Cockpit Association, Cardiff Business School, Cardiff University; and Eaton, J. (2001). Swim Together or Drown Separately, *The AVMARK Aviation Economist*, October, pp.12-13.

<sup>15</sup> Boyd, C. (2001). HRM in the Airline Industry: Strategy and Outcomes, *Personnel Review*, 30(4), p.451.

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immediate future, especially in the wake of terrorist attacks or wars that have a massive negative impact on passenger confidence.

Second, demand for air transport is procyclical, is that air traffic generally expands (contracts) with increased (reduced) economic growth, but at a much faster rate. Business class travel is particularly sensitive to economic fluctuations, which has a disproportionate impact on airlines' revenue and profitability.

Third, labour accounts for a significant proportion of total operating costs and is one of the few variable costs under the direct and more immediate control of management (unlike fuel costs, landing charges, aircraft costs, etc.). Labour costs typically account for a fifth of the operating costs of Asian airlines and a third for European and US carriers.<sup>16</sup> In other areas of the industry, such as air traffic control, around two-thirds of operating costs are labour costs.<sup>17</sup>

These three features of the industry have important implications for human resource management policies and labour relations. First, the "perishability factor" means that in response to any crisis, airlines will try to move quickly to cut capacity in order to minimize financial losses. Capacity cuts invariably result in job losses, both directly and indirectly (i.e. jobs are lost at the airline in question and in a range of support activities such as catering, cleaning, fuelling, airport services, local suppliers, etc.).

It is estimated that one operational aircraft supports 150 to 250 direct jobs, and there is one additional indirect job for every direct airline job.<sup>18</sup> The United Kingdom's Transport and General Workers' Union (TGWU), which represents over 46,000 employees in the industry including cabin crew, catering, ground handling and security, estimates that for every one job lost in an airline, between four and ten jobs will be lost inside the perimeter of the airport and a minimum of a further three jobs per airline lost outside the perimeter.<sup>19</sup> In the words of one union official, "Job losses in the industry are like a wave, or a ripple on a pond. It starts with the airlines and just gets bigger and bigger the further out you move from the airport to the local community and related businesses".<sup>20</sup>

Based on the figures compiled by the Air Transport Group at Cranfield University in the United Kingdom, who estimate that around 800 aircraft have been grounded since 11 September,<sup>21</sup> these "multiplier" effects suggest that 120,000 to 200,000 direct jobs will be lost at airlines around the world, and a total of 240,000 to 400,000 in the civil aviation industry.

<sup>16</sup> Oum, T. and Yu, C. (1998). *Winning Airlines: Productivity and Cost Competitiveness of the World's Major Airlines*, Boston, MA: Kluwer, p.201.

<sup>17</sup> Alexander ter Kuile (CANSO), information made available at the ILO Think Tank Meeting (Geneva, 29-30 October 2001).

<sup>18</sup> ILO (2001). Chairperson's Summary, *Think Tank on the Impact of the 11 September Events for Civil Aviation*, 29-30 October, Geneva: International Labour Organization.

<sup>19</sup> TGWU (2001). Evidence to the Transport Sub-Committee from the Transport and General Workers' Union, London: TGWU.

<sup>20</sup> Interview notes.

<sup>21</sup> Morrell, P. and Alamdari, F. (2001). *The Impact of 11 September on the Aviation Industry*, Geneva: International Labour Organization, p.14.

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The second factor – the procyclical nature of the industry – often means that the expectations of management and labour are out of step with current or future market conditions. For example, during any downturn or crisis, when airlines suffer a more significant decline in demand than most related businesses, costs will be tightly controlled and employees are often expected to make sacrifices to safeguard the financial position of the airline. When business picks up, airlines still tend to be cautious on costs, knowing that traffic might be lost to rivals in an increasingly competitive and deregulated aviation market or adversely affected by any future downturn.

Employees, in contrast, anticipate improvements in pay and benefits in line with business prosperity, as well as an element of “catch up” to make up for previous sacrifices. This “mismatch” is most apparent, and potentially most explosive, at the peak of the business cycle, when employee expectations are still rising but airlines anticipate, or actually face, falling demand.

Thus, prior to the events of 11 September, even though traffic figures were already in decline:

In the United States, *United Airlines* and the Air Line Pilots Association (ALPA) agreed on a contract that awarded pilots an average 30 per cent increase, with *American Airlines* facing a similar increase. Claims were based on both “catch-up” for past concessions (airline pilot salaries actually fell by 1.3 per cent between 1991 and 1999) and “comparability” with contracts negotiated elsewhere. *Comair*, *Delta’s* regional airline, faced prolonged strike action in 2001 and disputes were threatened at *Air Wisconsin* (flight crew) and *Piedmont* (cabin crew). Industry labour costs were expected to rise by over 6 per cent in 2001, following an increase of over 8 per cent in 2000, compared to just 2.5 per cent in 1998 and 3.1 per cent in 1999.

- In Europe, several carriers faced industrial disputes during 2001, including *Alitalia*, *Iberia*, *Lufthansa* and *Sabena*, and *BA* pilots were preparing for possible action in recognition of previous concessions and on the basis of comparability with the significant increase in pay for *Lufthansa* pilots.
- In Asia, *Cathay Pacific*, *Korean Air* and *Japan Air System* all faced disruption in 2001. At the beginning of October, pilots at *Cathay Pacific* entered their fourth month of work-to-rule, sick-outs and other industrial action, which was estimated to have cost the company as much as US\$5 million a day.

Researchers at MIT have found that the length of contract negotiations in the United States civil aviation industry are not only cyclical, but the worst periods, in terms of the likelihood of prolonged negotiations, seem to straddle the cusp of the industry’s financial slumps (i.e. beginning in the later years of the industry’s “boom” times and stretching into the first years of the “bust” times).<sup>22</sup>

The third factor – airlines’ cost structure – means that adjustments made in response to any crisis invariably focus on labour costs. In fact, in an age of globalization and an ever more deregulated operating environment, labour increasingly bears the brunt of cost-cutting programmes, service quality initiatives, outsourcing strategies, etc.<sup>23</sup> This feature of the industry is perhaps the most evident at the present time, as airlines and other civil aviation companies seek to adjust to the events of 11 September.

<sup>22</sup> MIT, op. cit.

<sup>23</sup> Blyton et al (2001). Op.cit.; See also Oum and Yu, op. cit..

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### 3. Labour restructuring in response to 11 September

Following the events of 11 September, US carriers moved very quickly to announce schedule and employment cutbacks. The industry had already been hit by falling passenger demand, especially for business travel, and most carriers announced cuts of around 20 per cent. Early lay-off announcements, as illustrated in table 1, matched the schedule cuts.

Table 1. Initial cuts in the United States

Carrier	Total employees	Lay-offs (Oct. 2001)	Schedule cuts (%)
America West	14,000	2,000 (14%)	20
American <sup>24</sup>	138,000	20,000 (20%)	20
Continental	60,000	12,000 (20%)	20
Delta	82,500	13,000 (16%)	20
Northwest	53,000	10,600 (20%)	20
United	100,000	20,000 (20%)	20
US Airways	56,000	11,000 (20%)	23

In Europe, the fall in traffic was much less severe, and so too were the initially announced job losses. Three factors appear to account for the slower adjustment.

First, there was greater uncertainty about the impact of 11 September. Second, flag carriers were unclear about whether, or to what extent, any financial or other support would be forthcoming from national governments or the European Commission (EC). Third, provisions for social dialogue via works councils and other mechanisms required prior consultation on job losses with employees and trade union representatives.

*Lufthansa*, for example, only on 22 November 2001 set in motion procedures to lay off between 2,000 and 4,000 employees from the end of December 2001, following protracted negotiations with the public sector union Ver.di and the pilots' union Vereinigung Cockpit. A range of other cost-cutting measures have also been agreed, including a hiring freeze for pilots and a four-day working week for cabin crew. However, the company failed to reach an agreement for a four-day working week for ground staff and a commensurate 20 per cent pay cut.

There is a clear asymmetry in the response of North American and European airlines to the crisis. In North America, airlines immediately announced swathing job cuts and then embarked on a process of (often difficult) negotiations with employee representatives as trade unions sought to reduce the scale and mitigate the effects of impending job losses.

In Europe, in contrast, many carriers considered, and implemented, a range of alternatives to direct job losses and consulted extensively with employees and trade union representatives, usually in accordance with national employment law. In the case of *BA*, for example, one union official commented that "We have had more meetings with

<sup>24</sup> Includes TWA.

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management than at any other time that I can remember. At times it seemed that we were having more meetings than there were days in the week”.<sup>25</sup>

Data are presented in table 2 on the initial and revised job cuts announced by airlines since 11 September, along with examples of cost-cutting measures designed to complement or avoid job losses.<sup>26</sup> As the data indicate, the net result of these different approaches in North America and Europe may well be the same in terms of a much reduced number of lay-offs than initially anticipated. However, the approach to social dialogue in North America seems to have exacerbated long-standing tensions between management and labour.

*United Airlines*, for example, has encountered problems with the renegotiation of pilot contracts and currently faces the prospect of strike action by machinists. Negotiations with the International Association of Machinists began in December 1999, and the machinists have not had a pay increase since 1994.

*American Airlines* initially stated that it intended to invoke *force majeure* clauses in its labour contracts that would permit it to void certain lay-off benefits, but the carrier retreated in the face of widespread criticism from trade unions and other organizations.

Given the history of labour relations in the industry, the impact of procyclical demand, a perishable product and the high proportion of labour costs, it is perhaps unsurprising that crisis can lead to opportunism, or at least accusations of opportunism, rather than constructive dialogue or the creation and consolidation of social partnership. This is certainly the initial conclusion of MIT’s global airline industry study, which has reported that responses to the crisis, to date, have increased tensions and lowered trust, and will probably lead to intensified conflict in the weeks and months ahead.<sup>27</sup>

Many unions claim that managements have used the events of 11 September to push forward pre-existing restructuring plans, developed during the earlier downturn of 2001, often without proper consultation. Roy Freundlich, spokesman for the Air Line Pilots Association (ALPA) at *US Airways*, for example, claimed that the carrier’s proposed cuts were “opportunistic and, it appears, excessive ... There is a difference between getting through a crisis and taking advantage of it ... They have cried poverty too many times before”.<sup>28</sup>

<sup>25</sup> Interview notes.

<sup>26</sup> Many of the “revised” figures, especially for US carriers, refer to *involuntary* job losses after voluntary severance or other schemes have been exhausted.

<sup>27</sup> Kochan, T.A. (2001). *Requirements for Airline Industry Recovery*, Massachusetts Institute of Technology, USA.

<sup>28</sup> *Airline Business*, November 2001.

**Table 2. Airline job losses**

**North America**

<b>Airline</b>	<b>Initially proposed job losses (percentage of workforce)</b>	<b>Revised job losses (percentage of workforce)</b>	<b>Employment cost reduction measures</b>
Air Canada	9,000 (4,000 announced August 2001, 5,000 announced 26 September)	8,871	Customer sales and service agent members of CAW agree to 20 per cent reduction in hours for 20 weeks. Pilots agree to mandatory work-sharing, voluntary block time reduction and retirement incentive scheme.
AirTran			Changes to pilots four- year contract (22 per cent saving on pilot related costs) in exchange for no furlough agreement.
Air Wisconsin	300 (10%)		Reduced pay and suspended bonuses for its senior officers and encouraged workers to take leave without pay for the month of October
Aloha Airlines	250		
American Airlines (AA, American Eagle, TWA)	20,000 (14%)		Chairperson and CEO Don Carty elected to forego compensation for the remainder of the year. Employees take voluntary pay cuts – signing up using the company web site.
American Trans Air	1,500 (19%)		
America West	2,000 (14%)		
Atlantic Coast Airlines	11%		30-40 per cent reduction in executive pay and suspending all executive cash bonuses, freeze on merit pay increases for management and salaried employees, elimination of cash bonus programmes for 2001 and suspension of bonus for 2002.
Atlas	200 (14%)		
Canada 3000	1,400 (33%)	4,800/airline bankrupt	
Continental Airlines	12,000 (21%)	8,500 involuntary job losses (15%)	CEO Gordon Bethune and President Larry Kellner elected to forego all compensation for the remainder of the year. Leaves of assistance and early retirements.
Corporate Airlines	100		
Delta Airlines	13,000 (16%)	2,000 involuntary job losses (2%)	CEO Leo Mullin elected to forego compensation for the remainder of the year. Meal service cut in economy class flights of less than 1750 miles and first class less than 700 miles. 1-, 2-, 3- and 5-year voluntary leaves, voluntary severance and early retirement.
Emery Worldwide Airlines	130 (42%)		
Express Airlines	650 (30%)		

<b>Airline</b>	<b>Initially proposed job losses (percentage of workforce)</b>	<b>Revised job losses (percentage of workforce)</b>	<b>Employment cost reduction measures</b>
Frontier Airlines	440		20-40 per cent salary reductions for directors, management salary reductions.
Hawaiian Airlines	430 (12%)		
Midwest Express	450 (12%)		
Mesa Air Group	700		Senior management 50 per cent pay cut. Middle management 20 per cent pay cut. Employees 10 per cent pay cut. All those affected offered stock option and bonus programme to make up for lost wages – those excluded (pilots/mechanics) refused to accept pay cuts.
Mesaba Airlines	400 (10.8%)		
Midway Airlines	1,700		
Midwest Express	450 (12%)		
Northwest Airlines	10,000 (19%)	9,000 (17%)	Attrition, voluntary leaves and elimination of open positions.
Southwest Airlines			Continue to hire pilots and flight attendants to maintain adequate staffing levels.
Spirit Airlines	800 (33%)		
Sun Country Airlines			One year contract for flight crew involving a pay freeze, increased insurance benefits and a common rate of pay for all equipment types.
TSA	200		
United Airlines	20,000 (20%)		Chairman and CEO Jim Goodwin requests suspension of his salary through the end of the year, and directors pay reduced.
US Airways	11,000 (24%)	9,000	Time off (voluntary furloughs) for up to 3 years.
Vanguard Airlines	10-15%		
World Airways	250		

## Europe

<b>Airline</b>	<b>Initially proposed job losses (percentage of workforce)</b>	<b>Revised job losses (percentage of workforce)</b>	<b>Employment cost reduction measures</b>
Aer Lingus	600 temporary staff and 1,700 (27%) permanent staff	2,026 (32%)	Non-payment of 5.5 per cent pay increase, release of temporary staff, curtailment of overtime, cancellation of cadet pilot and apprenticeship programmes, unpaid leave.
Air 2000	365 (14%)		5 per cent reduction in pilots' salaries, 16 captains demoted to first officers.
Air Europa	800 (38%)		
Alitalia	900 flight crew		Early retirement offered to 900.

Airline	Initially proposed job losses (percentage of workforce)	Revised job losses (percentage of workforce)	Employment cost reduction measures
	1,600 ground staff	compulsory) (14%)	
Austrian Airlines	800 (10%)		Staff taking deep cuts in holiday pay, settling for unpaid holiday and stepping up part-time working and early retirement
British Airways	1,800	7,000	CEO Rod Eddington and 12 senior executives take 15 per cent pay cut, 600 senior managers take 10 per cent pay cut – voluntary. BA refuse to pay management bonuses until 2002 and propose 5 per cent pay cut for middle management. 36,000 employees holiday bonus for October “temporarily” unpaid. Reduced over-time, cut-back of industrial placements, contractors and agency staff.
British European	50		
bmi British midland	600 (11%)		Job sharing for pilots (half week for half normal pay) will significantly reduce the number of pilot redundancies.
Cimber Air	44		
City Bird	600 (bankruptcy)		
Finnair			Management take 10 per cent salary reduction Holiday and incentive bonuses and pay increases suspended for 2002 for office staff, technicians, pilots, engineers and management. Termination of temporary contracts.
Gill Airways	240 (ceased trading)		
Icelandair	273 (11%)		
Iberia	Unspecified reductions as a result of downturn in traffic	2,516 (9.3%)	
JMC	105		
KLM	2,500		12,000 Netherlands based employees on short time shifts and employees asked to take “substantial” pay cuts. Scheduled pay increase postponed, ground staff to take a four day cut in time off with flight staff taking a six day cut.
LOT Polish Airlines	800 (20%)		
LTU			10 per cent pay cuts and working conditions agreement with pilots (loss of 13th month bonus until 2003 and no pay rise until 2004).
Lufthansa	None initially	2,000-4,000	Executive board take 10 per cent pay cut in basic remuneration. Senior management expected to follow suit. 825 cabin crew on probation will not be taken to full time contracts. Overall employee payroll to be trimmed by 10 per cent and shorter working hours for its flight attendants. Co. has applied for 12,000 cabin crew to be placed on short-time working.
Monarch	80 (4%)		
SAS	800-1,100	3,300-3,600 (10%)	
Sabena	12,000: airline collapse	6,000 employees (50 per cent) due to creation of DAT Plus	Creation of DAT Plus employing half of Sabena’s employees. Cabin crew foregoing seniority and pilots salaries reduced by 30 per cent despite increased productivity agreement.
Swissair	9,000 1,000	5,363 in October	

Airline	Initially proposed job losses (percentage of workforce)	Revised job losses (percentage of workforce)	Employment cost reduction measures
Airlines			and staff pay cuts and early retirement.
Transavia	323 (22%)		
Virgin Atlantic	1,200 (15.2%)		Recruitment freeze, voluntary early retirement/redundancy, voluntary furloughs, non-renewal of temporary/probationary contracts, pay cuts.

### Latin America

Airline	Initially proposed job losses (percentage of workforce)	Revised job losses (percentage of workforce)	Employment cost reduction measures
LanChile		650 (6.5%)	Recruitment freeze and reduced training.
Mexicana		70	
Transbrasil			Non-payment of wages (90 per cent September, 100 per cent October and November).
Varig		1,700 (10%)	

### Asia Pacific

Airline	Initially proposed job losses (Percentage of workforce)	Revised job losses (Percentage of workforce)	Employment cost reduction measures
Ariana Afghan Airlines	1,300		
All Nippon Airways	1,000 (9%)		Voluntary leave offered to 12,000 (3,000 management and 9,000 general employees) early next year paid at 40 per cent less than their normal salary.
Air New Zealand	800 (8%)		6 of 12 senior executive posts have been cut, and remaining managers pay reduced by 15 per cent.
Asiana Airlines	360 (5%)		
Cathay Pacific			Hong Kong staff lose their discretionary annual bonus and cabin crew were offered unpaid leave. Hiring freeze in force for ground staff and cabin crew, pilot recruitment phased out.
Korean Air	350 (5%)	1,000 (6%)	
Quantas	1,500-2,000		Wage "pause" in exchange for lump sum bonus if profits exceed previous year. Annual and long service leave, job sharing and unpaid leave.
Singapore Airlines			Pay cuts for management of between 7-15 per cent. Pay cuts for employees of between 5-7 per cent.

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## Africa and the Middle East

Airline	Initially proposed job losses (percentage of workforce)	Revised job losses (percentage of workforce)	Employment cost reduction measures
Air Afrique	4,000		
Gulf Air	450		

This view was echoed in some sections of the business press. *Fortune* magazine, for example, pointed out that while 11 September caused the descent into crisis, management should be held responsible for the financial vulnerability of many airlines.<sup>29</sup> The latter was attributed to a “binge-purge” cycle of adding capacity and loading on debt during good times and then pleading for government assistance and concessions from labour during bad times.

It was in this context that Pat Friend of the Association of Flight Attendants (AFA) in the United States described the attitude of US airlines as “abysmal”, seeking the maximum commitment of public funds with no guarantees in terms of job protection and continuing resistance to security measures which add costs.

Similar criticism has been voiced elsewhere. Unions in Brazil, for example, accused their airlines of taking advantage of the crisis to justify various concessions such as wage adjustments.<sup>30</sup> In the United Kingdom, the British Air Line Pilots Association (BALPA) has suggested that charter airlines may be using the crisis to make amends for “rash post-consolidation expansion”.<sup>31</sup>

Thus, despite, or in some cases precisely because of the crisis in the industry, court action, strikes and other forms of action have been threatened or implemented in recent weeks at various airlines and other civil aviation companies around the world (e.g. *Alitalia*, *Cathay Pacific*, French air traffic controllers, Manchester Airport, *Mexicana*, *Qantas*, *Sabena* and *United Airlines*). These developments illustrate, on the one hand, the legacy of adversarial relationships in the civil aviation industry and, on the other hand, the need for more constructive forms of social dialogue.

Despite these ongoing problems, there are many examples of what most parties would regard as good practice and several examples of innovative and socially responsible responses to the crisis. In the United States, for example, *Southwest* is widely regarded as an airline which has followed a “high commitment” model of labour relations and human resource management. The company has developed a strong culture of social dialogue, “thick” corporate communications, high levels of supervisory involvement with front-line employees, strong corporate leadership and a commitment to building trust and employee morale.<sup>32</sup>

*Southwest* regularly achieves the highest levels of performance in the industry (in terms of profits, customer satisfaction, quick turnaround of aircraft and labour productivity) and topped *Fortune*’s list of “Best companies to work for” in 1998 (the

<sup>29</sup> *Fortune*, 15 October 2001.

<sup>30</sup> ITF Civil Aviation Briefing, Issue 28, 13 November 2001.

<sup>31</sup> Interview notes.

<sup>32</sup> See von Nordenflycht, op. cit.

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company was placed in the top four in 1999, 2000 and 2001). To date, *Southwest* has not announced any lay-offs in response to the events of 11 September, although as a “point-to-point” carrier it is more akin to many of Europe’s low cost-carriers, such as *Ryanair* and *easyJet*, which have experienced rising traffic in recent months.

*Delta* and especially *Continental Airlines* provide further examples of innovative responses to the crisis. *Delta* was traditionally managed on the basis of a strong “family culture”, with high wages and a commitment to lifetime employment. This strategy worked very well for many years, until the carrier announced 15,000 lay-offs in 1994 and unilaterally cut wages.<sup>33</sup>

Following the events of 11 September, *Delta* has worked hard to avoid any compulsory lay-offs, with more than 11,000 employees accepting one of six different voluntary job reduction programmes. The number of involuntary job losses will therefore total just 2,000, as reported in table 2. Many employees on extended leave of absence will no doubt be recalled when demand picks up.

*Continental Airlines* has transformed its culture in recent years (post-1993) and the carrier has improved its performance based on higher levels of trust and employee commitment.<sup>34</sup> Frequent and substantive communications between management and employees at multiple levels have been introduced, along with performance-based pay, and policies and procedures covering all employees to foster interoccupational cooperation.<sup>35</sup>

After initially announcing job losses of 12,000 employees, *Continental* was able to reduce this figure by 3,500 after workers slated for dismissal opted for early retirement or leaves of absence. The latter programmes allow workers to continue to enjoy some company benefits, such as health insurance, for up to a year.

In Europe there has been an even greater emphasis on avoiding job losses wherever possible, especially on an involuntary basis. As in the United States, many European airlines simply do not have the money available to fund existing severance and early retirement packages (at least in the absence of state support) and most unions are strongly opposed to compulsory lay-offs.

Asia-Pacific, Latin American and African airlines face a similar situation in terms of cash flow problems. Nonetheless, of the unions representing airline staff who responded to the survey, 59 per cent reported that voluntary early retirement programmes had been introduced since 11 September and 48 per cent reported voluntary redundancy programmes (see Appendix, question 1). Several African unions have reported that they are willing to accept and well placed to deal with voluntary redundancies, as the necessary provisions exist in established collective agreements. In one case, however, these agreements were circumvented by parliamentary decisions and High Court rulings on bankruptcy.<sup>36</sup>

The most common response to the crisis has been to freeze recruitment (reported by 83 per cent of respondent unions). Other cost-cutting measures designed to avoid the

<sup>33</sup> See Hoffer Gittell et al, op. cit. *Delta* is currently the subject of a union organising campaign by the Association of Flight Attendants.

<sup>34</sup> See Bethune, G. (with S. Huler) (1998). *From Worst to First*, New York: John Wiley & Sons; see also Hoffer Gittell et al, op. cit.

<sup>35</sup> von Nordenflycht, op. cit.

<sup>36</sup> Interview notes.

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enforced lay-off of core staff include the non-renewal of temporary contracts (62 per cent of respondent unions), probationary staff not being transferred to full-time contracts (59 per cent), greater temporal flexibility such as shorter working time, part-time working and work sharing (45 per cent), pay cuts for management (45 per cent), pay freezes for airline staff of varying duration (45 per cent), pay cuts for non-managerial staff (31 per cent) and voluntary furloughs (28 per cent). Despite all these measures, 48 per cent of unions reported compulsory redundancies.

Table 2 includes summary details of such policies introduced by many airlines around the world. *All Nippon Airways (ANA)* provides an example of how these different policies might be combined. In addition to 1,000 job losses, *ANA* has sought to cut costs by postponing the appointment of 200 cabin crew recruited for February 2002, dropping plans to recruit a further 300 cabin crew, and offering voluntary leave to 12,000 staff for periods of one month (staff will receive 40 per cent less than their normal monthly salary during leave periods). In addition, around 100 staff have accepted early retirement.

Unions were far less likely to report cost-cutting measures at regional or low cost airlines. This is consistent with the lesser impact of 11 September on these carriers. However, some regional operators, such as *bmi Regional* and *Flightline*, are more adversely affected because they fly routes for mainline carriers. During economic downturns, this work is often pulled back into the mainline carrier under contract and scope clauses.<sup>37</sup>

In discussions with management and trade union representatives, frequently cited examples of “good practice” in Europe included:

- *BA's* intensive process of consultation and the conversion of job losses into a “personnel equivalent”, which is arrived at by adjusting full-time staff numbers to take account of part-timers, overtime working and contract staff. By releasing short-term contractors and cutting overtime, *BA* will “lose” 2,100 jobs. Another 1,200 will be shed through natural wastage. Other options include unpaid leave or part-time work for periods of three months or more. In all, only 200 jobs will disappear as a result of voluntary redundancy or early retirement, a clear indication of the company's determination to preserve cash.
- The part-time working agreement reached between *BALPA* and *bmi British Midland*. The agreement is formulated to provide 50 per cent of the working days that a full-time pilot could be expected to work, with a corresponding 50 per cent reduction in pay. Part-time pilots will be required to work up to nine days per roster period, with part-time blocks of work normally of at least two consecutive days (pilots can express a preference to be rostered in two-, three-, four- or five-day blocks of work, and the *bmi* Crewing Department will endeavour, wherever possible, to produce rosters where the bulk of the work is close to the part-time pilot's preference). The agreement includes appropriate adjustments for pension contributions and a range of unchanged provisions (e.g. days off bought payments, subsistence, airport standby allowances, late finish payments, flying licence renewal costs, medical fees, private medical cover, sick leave time periods and annual leave).

<sup>37</sup> Scope clauses ensure that if regional/low cost operations increase, then this must be accompanied by an increase in mainline operations to ensure career opportunities for pilots or other occupational groups. Conversely, if demand falls, work is consolidated at the mainline carrier.

- *KLM's* programme of short-time working, deferral of the implementation of part of a planned pay increase, and greater flexibility to ensure a target 2 per cent increase in structural efficiency.

As already indicated, the knock-on effects of job losses at major airlines can be substantial, both inside and outside the civil aviation industry. Table 3 presents a range of examples of job losses announced by other air transport companies.

As with airlines, the impact of 11 September has been extremely varied across different countries and different companies. Airports Council International (ACI), which has a membership of some 541 airports and airport authorities operating 1,400 airports in 168 countries and territories, has reported that larger airports (especially international hubs) have faced a far greater impact on their business as a result of recent events.

London Heathrow, for example, which relies heavily on transatlantic business, has been harder hit than London Gatwick. On a global scale, North American airports have been much more severely affected than Asia-Pacific airports.

In North America, where airports generate an estimated US\$450 billion per annum and employ 1.9 million employees (and generate a further 5 million "dependent" jobs in local communities), total revenue losses resulting from 11 September were estimated to be:

- \$84 million for the period 11-15 September, when airports were shut down or severely affected;
- \$101 million for the week 16-22 September; and
- \$2.3 billion for the 12-month period up to September 2002.<sup>38</sup>

ACI-North America (ACI-NA) has also sought to gauge the impact of 11 September on major food and beverage and retail concessionaires in North American airports, based on a survey of nine major companies collectively employing over 31,000 people in North American airports. ACI-NA conservatively estimates that these companies will lay-off 9,600 employees, or one-third of their total workforce. As the nine companies account for around 50 per cent of the total airport concessions market it is estimated that total job losses could be around 20,000.<sup>39</sup> A similar level of job losses (i.e. 30 per cent) has been reported by professional service providers certified as "disadvantaged business enterprises" (DBEs).<sup>40</sup>

**Table 3. Job losses in other civil aviation companies**

Company	Initially proposed job losses (percentage of workforce)	Revised job losses (percentage of workforce)	Employment cost reduction measures
Airbus (United Kingdom)	1,600 (18%)		Wage freeze, short-time working and 2 week lay-offs for French employees

<sup>38</sup> These figures are based on a survey of 50 large, medium-sized and small airports. Airports Council International-North America (2001). The UN Airport Industry and Estimates of Airport Economic Impacts of recent Terrorist Threats, 27 November, ACI-NA.

<sup>39</sup> *ibid.*

<sup>40</sup> *ibid.*

Company	Initially proposed job losses (percentage of workforce)	Revised job losses (percentage of workforce)	Employment cost reduction measures
Airtours (MyTravel)	450		
Anglo Normandy	45		
BAE Systems	1,700		
BBA	50		
B/E Aerospace	1,000 (22%)		Senior management pay reduced by 35-50 per cent.
Bombardier Aerospace	3,800		
Boeing	20,000-30,000		
Embraer	1,800		
FLS Aerospace	900		
Gate Gourmet	3,000 (10%)		
Globe Ground (Stansted Airport)	80		
Go-Ahead Aviance (airport services)	700		
Goodrich	2,400		
Heathrow Airport	6,000 (10%)		
LSG Sky Chefs	4,800 (30%)		
Manchester Airport	90		
National Air Traffic Services	225 (2%) of support and management staff		
Rockwell Collins	2,600 (15%)		
Rolls-Royce	5,000 (aircraft engine division)		
Sabena Technics	700 (30%)		
Shorts (Belfast)	2,000 (26%)		No overtime, non-renewal of contract workers.
TRW Aeronautical Systems	1,100 (16%)		
Tenzing Communications	80 (sales and marketing)		
Thomas Cook AG	2,600 (10%)		Employees earning in excess of £10,000 a year asked to take a pay cut of 3-10 per cent.
Travelocity	(10%) non customer service workforce		
UTC	5,000		

In the Asia-Pacific region, in contrast, many small and medium-sized airports have reported positive passenger growth for the third quarter of 2001 compared with the third quarter of 2000, despite the events of 11 September. An ACI survey of members representing 20 of the Asia-Pacific region's 154 ACI member airports found that only 18 per cent had introduced lay-offs or furloughs of staff. The majority had relied on other cost cutting measures such as reduced staff travel (46 per cent) or a combination of recruitment

freezes, reduction of contract and/or “on-loan” staff, and curtailing “discretionary” expenditure such as training (64 per cent).<sup>41</sup>

The preferred strategy of airports in this region has been to retain staff and cut back on other costs such as capital budgets. As one representative from the region put it, “Airports survived the Asian economic crisis, albeit with some staff retrenchments. This is another bump on the road, but the long-term prospects are for growth and airports need to retain good staff”.<sup>42</sup>

#### 4. Preferred response to the crisis

In order to determine what might be regarded as “socially responsible ways to respond to the crisis”, trade unions were asked how acceptable a range of different human resource policies would be to their members. Responses ranged from “Acceptable under normal circumstances” to “Only acceptable as a short-term/crisis measure” and “Unacceptable under any circumstances” (see Appendix, question 4). The responses to this question are reported in table 4.

The majority of respondents regarded voluntary early retirement, part-time working, educational leave and employee share ownership plans (ESOPs) as human resource policies that might be introduced at any time.<sup>43</sup> Rather more human resource policies were only acceptable as a short-term/crisis measure, including working time adjustments (e.g. short-time working/shorter working week and/or a reduction in the number of shifts), the non-transferral of probationary staff to full-time contracts, and forgoing bonus pay.

Pilots in particular expressed concerns about recruitment freezes and reduced training. According to InterCockpit Pilot Training Network, an independent subsidiary of *Lufthansa* Flight Training, European airlines will need up to 80,000 new pilots over the next ten years. The European Cockpit Association (ECA) has therefore called on the European Commission to consider policies that might ensure the continuation of qualifications and licenses amongst unemployed pilots, the need to support the existing and future training costs of pilots, and policies to promote labour mobility within the European Union (EU).

**Table 4. Union responses to human resource policies (percentage of respondents)**

Policy	Acceptable under normal circumstances	Only acceptable as a short-term/crisis measure	Unacceptable under any circumstances
Recruitment freeze	28	56	16
Voluntary early retirement	73	27	–
Voluntary redundancy	39	57	4

<sup>41</sup> ACI-Pacific (2001). *Report on the Impact of Events of September 11 on Airports in the Pacific Region*, Airports Council International.

<sup>42</sup> Interview notes.

<sup>43</sup> It is worth noting that ESOPs tend to produce more polarized views. This mirrors the findings of our earlier and more representative study of civil aviation unions, in which less than one-in-five unions with experience of ESOPs regarded this form of financial participation as a vehicle to improve management worker cooperation and 45 per cent saw ESOPs as a “ploy” to make workers pay for past mismanagement (see Blyton et al, 1998a, p.23).

Policy	Acceptable under normal circumstances	Only acceptable as a short-term/crisis measure	Unacceptable under any circumstances
Compulsory redundancy	–	31	69
Voluntary furlough	41	45	14
Compulsory furlough	–	35	65
Unpaid holiday/leave	32	25	43
Short-time working	11	70	19
Shorter working week	27	65	8
Fewer shifts per month	17	70	13
Part-time working	54	32	14
Work-sharing	40	36	24
Probationary staff not transferred to full-time contracts	8	61	31
Non-renewal of temporary contracts	37	41	22
Reduced training	4	43	53
Educational leave	57	29	14
Pay freeze	–	48	52
Forgo holiday pay	–	27	73
Forgo bonus pay	–	54	46
Pay cut	3	21	76
Employee share ownership plan (ESOP)	48	19	33

Air traffic controllers have also expressed grave concerns about cutbacks to training in some countries. Worldwide, it is estimated that there is a 15 to 20 per cent shortage of air traffic controllers, and it takes three to five years for controllers to be fully trained and operational.<sup>44</sup>

A significant number of human resource policies were widely regarded as being unacceptable under any circumstances, including compulsory redundancies and furloughs, the suspension of holiday pay and pay cuts. Even the suggestion of these policies has led to the threat of strike action by several unions around the world in recent months. Even within the same airline, however, pay cuts and compulsory job losses have been agreed by some unions and rejected by others. Such cases illustrate the point made previously that the data presented in table 4 are illustrative rather than strictly representative. Put differently, these data are not a blueprint for restructuring. Every situation must be carefully considered and properly negotiated by the social partners.

The human resource policies discussed thus far relate primarily to company-level decisions, although given that many flag carriers are publicly owned these policies will often involve government input (e.g. financial support for early retirement programmes and voluntary severance packages or partial assistance for short-time working). Unions were therefore asked about the policies they believe national governments should pursue to support the civil aviation industry during the current crisis (see Appendix, question 5). The summary results are reported in table 5.

<sup>44</sup> Marc Baumgartner (IFATCA), information made available at the ILO Think Tank Meeting (Geneva, 29-30 October 2001).

**Table 5. Government policies preferred by unions (percentage of respondent unions)**

Policy	Disagree	Neither agree nor disagree	Agree
Contribution to pension funds for early retirement	15	15	70
Funding for severance pay	15	15	70
Low-cost loans to civil aviation employees	15	26	59
Payments to partially cover short-time working	8	31	61
Payments to fully cover short-time working	19	22	59
Extending unemployment benefits	8	11	81
Funding for medical/health insurance	11	30	59
Funding for retraining programmes	–	15	85
Financial compensation to airlines for loss of traffic	24	20	56
Financial compensation to airports for loss of business	31	19	50
Financial compensation to other companies (e.g. air traffic services, catering, aircraft manufacturers, etc.)	35	19	46
Financial support to airlines for higher insurance costs	12	16	72
Financial support to airlines/airports for improved security	8	8	84
Relaxation of foreign ownership rules	61	23	16
Protect services to remote communities	4	12	84
Promote mergers/take-overs/consolidation	61	23	16
Initiatives to promote social dialogue	–	7	93

There was very strong approval of funding to support retraining programmes, as well as extending unemployment benefits. Financial support to airlines/airports for improved security also elicited very strong support, as did financial support to enable airlines to cover higher insurance costs.

Financial compensation for loss of business/traffic received far less support. In fact, several unions were extremely critical of such assistance. As one US union official explained, “The airlines demanded privatization and deregulation in the 1980s. They should not now be turning to the Government for financial assistance”.<sup>45</sup> European unions have also expressed concern over the financial support offered to US airlines, which is widely regarded as potential distortion of competition on transatlantic routes.

Loyola de Palacio, the European Union’s (EU) Transport Commissioner, has stated that the problem at present is not so much to maintain a level playing field in Europe but how to guarantee fair competition with the United States. However, whereas the Commission is trying to minimize any state support to European airlines, European unions would like to see a similar level of support to that offered in the United States. Trade unions are particularly concerned about the possibility of enforced consolidation within the EU as a result of the current crisis.

Not surprisingly, most unions, not only in Europe, are opposed to any policies designed to promote mergers/take-overs/consolidation, or indeed the relaxation of foreign ownership rules. These issues are closely associated with questions of public interest and public services.

<sup>45</sup> Survey notes.

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In the United States, for example, it has been cogently argued that, as a result of the 11 September events, civil aviation is more central than ever before to national security and macroeconomic recovery. As the industry cannot recover without improvements in employee and labour relations, industry experts at MIT have suggested that the Air Transportation Stabilization Board (ATSB) should require each loan applicant to demonstrate the commitment of the company and its workforce to a human resources strategy that can contribute to the industry's recovery.<sup>46</sup> Without such a strategy in place, airlines run the risk of failure and public funds will be wasted. New regulatory activities such as this should be more widely debated throughout the industry.

Individual unions have made a strong claim for continued public support of their national airline, typically on the basis of "public interest". The Central Representative Council of *Aer Lingus*, for example, has argued that, as an island economy, Ireland would suffer substantial losses without a national airline. The public interest case for the continuation of *Aer Lingus*, already in a very weak financial situation prior to 11 September as a result of the foot and mouth disease outbreak in the United Kingdom and the recession in the United States, is based on:

- the importance of tourism to the Irish economy (140,000 jobs). Passengers who fly direct into Ireland stay longer and spend more money (100 per cent of *Aer Lingus* operations are into and out of Ireland);
- the peripheral location and small population of Ireland demands services that are not purely dictated by profit maximization; and
- the continuation of foreign direct investment, especially from the United States, depends on regular, reliable and direct air links for both passengers and freight.<sup>47</sup>

Many more unions support government action to protect services to remote communities on similar grounds, especially island economies (e.g. Greece, Iceland, Indonesia and the Philippines) (see table 5).

The policy that elicited strongest trade union support was "Initiatives to promote social dialogue". Many individual airlines and other civil aviation companies were applauded for their efforts to promote extensive and more meaningful social dialogue following the tragic events of 11 September. But unions still regarded government initiatives in this area as vitally important.

The scale of the crisis has demanded government intervention in a range of business and related decisions, not least labour restructuring programmes, and unions want to be fully involved in these deliberations and policy decisions. Moreover, unions favour initiatives to promote social dialogue at the regional and international as well as the national level.

European unions, for example, along with other industry organizations, have pressed the European Commission to initiate social dialogue and create an *ad hoc* group to look at the social consequences of the civil aviation crisis (on the same basis as groups dealing with security and insurance issues).<sup>48</sup> The first meeting of this group took place in

<sup>46</sup> Kochan, op. cit.

<sup>47</sup> CRC (2000). Crisis in Aer Lingus, Dublin: Central Representative Council.

<sup>48</sup> See, for example, the joint statement issued by ACI, AEA, CANSO, ECA, ERA, ETF and IACA Europe to the Council of Transport Ministers meeting in Luxembourg, 16 October 2001.

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Brussels on 3 December 2001. Although the meeting produced only limited results, the Commission declared its intention to closely monitor the impact of the ongoing crisis in collaboration with the social partners.

At the global level, individual unions, the International Transport Workers' Federation (ITF) and other international organizations have welcomed the ILO's initiatives to promote social dialogue, in particular the Think Tank on the Impact of the 11 September Events for Civil Aviation, held in October 2001, and the Tripartite Meeting on Civil Aviation: Social and Safety Consequences of the Crisis Subsequent to 11 September 2001, held in January 2002.

## **5. The differential impact of the crisis on men and women and minorities**

There is a dearth of information on the employment of women and different ethnic groups in the civil aviation industry. The International Civil Aviation Organization (ICAO), for example, collects data on the total number of employees for airlines in 55 countries, but does not compile data on gender.

Data for individual countries are equally scarce. In the United Kingdom, for example, official statistics provide a breakdown for male (47.5 per cent) and female (52.5 per cent) employees in "Air Transportation", but there is no detailed breakdown for different occupational groups or subsectors of the industry (e.g. airlines versus aircraft maintenance, flight crew versus cabin crew).

The United States is one of the few countries to publish more detailed information. These data reveal that pilots are predominantly white males with college degrees (women make up just 3.7 per cent of the pilot workforce, blacks 1.9 per cent and Hispanics 4.3 per cent). Likewise, amongst mechanics only 6 per cent are female, 8.3 per cent are black and 9.0 per cent Hispanic. Flight attendants, in contrast, are 80 per cent female (blacks constitute 12 per cent of the cabin crew workforce and Hispanics 8 per cent).<sup>49</sup>

The most common response to questions about any differential impact on women and minorities (Appendix, questions 2 and 3) was that human resource policies were applied equally in the case of women and that there was generally no disproportionate effect on ethnic minorities. Most unions, however, were keen to distinguish between "disproportionate effects" and "discrimination".

It was not uncommon for unions whose membership was predominantly female (e.g. cabin crew) or drawn from ethnic minorities (e.g. catering and cleaning) to report a "disproportionate impact" on these groups as a result of recent labour restructuring programmes. For example, the AFA in the United States and the National Union of Commercial Cabin Crew (SNPNC) in France, both with a predominantly female membership, pointed out that there was a "disproportionate effect", by definition, on women.<sup>50</sup>

<sup>49</sup> Bureau of Labor Statistics. For a discussion, see Brown Johnson, N. (2001). Airlines, School of Management, University of Kentucky, USA.

<sup>50</sup> Survey notes.

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Other unions pointed out that many of the temporary or contract jobs targeted by “soft” cost-cutting measures (i.e. protecting the airline’s “core” staff by dismissing “peripheral” groups) had a disproportionate effect on women and ethnic minorities.

However, a full assessment of the differential impact on men, women and minorities would require a detailed analysis of different airlines, airports and other civil aviation companies, broken down by job category. In the limited time available it was impossible to compile such data.<sup>51</sup>

On the question of discrimination, several unions cited the role of contract clauses, most notably seniority rules, as an effective form of protection for women and minorities. As one union official commented, “Racism and sexism are institutionalized within some parts of the industry, but seniority is one labour market institution which counteracts this”.<sup>52</sup> In some cases, however, seniority clauses have been waived to provide additional benefits or advantages to these groups (e.g. the part-time working agreement signed by *bmi/British Midland* and BALPA states that pilots wishing to take up part-time work following maternity leave will be given priority for any vacancies, regardless of seniority).

There were other examples, in contrast, where human resource policies may be “formally fair” but “informally discriminatory”. Many restructuring programmes involve changes to working time or new shift patterns which might be less suitable for or acceptable to female employees. At *Aer Lingus*, for example, some employees have expressed concerns about proposed changes to shift arrangements that might lead to a significant number of female cabin crew “volunteering” for the redundancy package now on offer.

It has long been recognized that, in any restructuring exercise, there will be a range of decisions on job cuts ranging from voluntary redundancy (worker-selected) to compulsory redundancy (employer-selected). But many employees will “accept” a severance package because proposed changes to work organization and conditions of employment are no longer attractive or acceptable (“forced voluntary” redundancy).<sup>53</sup>

Redundancy schemes and changes to working arrangements should therefore be carefully monitored. Neither management nor unions should simply assume that an employee who “volunteers” for redundancy or leave of absence is acting of his or her own volition.

## 6. Conclusions

The impact of 11 September on employment and working conditions in the civil aviation industry has been immediate, significant, but also extremely varied. In some cases, recent events have served to exacerbate long-standing difficulties between the social partners. Given the importance of labour relations to the success of individual companies and the industry as a whole, new approaches must be found to establish “mutual gains” and a firmer foundation for management-labour relations.

<sup>51</sup> Requests were made to several civil aviation companies for such data. Most firms, however, said that they did not yet have any detailed breakdown and/or that they would not normally make such information available.

<sup>52</sup> Survey notes.

<sup>53</sup> See Turnbull, P. and Wass, V. (2000). Redundancy and the Paradox of job Insecurity, in E. Heery and J. Salmon (eds), *The Insecure Workforce*, London: Routledge, pp.57-77.

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In other cases, the events of 11 September have been seized as an opportunity to improve the quality of working life, the commitment of staff and the competitiveness of the organization. Instead of a simple “head-count” strategy, many organizations have developed innovative and socially responsible human resources strategies. It is important to learn from, rather than simply seek to imitate, such examples of best practice. Recent experience indicates that social dialogue is an effective, and certainly preferred, approach to the dissemination of best practice.

## Appendix

### ITF/Cardiff University questionnaire on the impact of 11 September events

Please answer all five questions. If you have any additional comments, please use the space between questions.

Name of union and country: \_\_\_\_\_

**Q.1. Which of the following policies have been introduced by aviation companies in which you have members following the events of 11 September 2001? (Please tick all that apply.)**

Policy	Flag/major airline	Low-cost/regional airline	Other civil aviation companies (e.g. airports, catering, ground handling, maintenance)
Recruitment freeze			
Voluntary early retirement			
Voluntary redundancy			
Compulsory redundancy			
Voluntary furlough			
Compulsory furlough			
Unpaid holiday/leave			
Short-time working			
Shorter working week			
Fewer shifts per month			
Part-time working			
Work-sharing			
Probationary staff not transferred to full-time contracts			
Non-renewal of temporary contracts			
Reduced training			
Educational leave			
Pay freeze			
Forgo holiday pay			
Forgo bonus pay			
Pay cut B management			
Pay cut B other staff			

**Q.2. Have the policies introduced by aviation companies since 11 September affected men more than women, women more than men, or both equally? (Please tick all that apply.)**

Policy	Affected men more	Affected women more	Applied equally
Recruitment freeze			
Voluntary early retirement			
Voluntary redundancy			

<b>Policy</b>	<b>Affected men more</b>	<b>Affected women more</b>	<b>Applied equally</b>
Compulsory redundancy			
Voluntary furlough			
Compulsory furlough			
Unpaid holiday/leave			
Short-time working			
Shorter working week			
Fewer shifts per month			
Part-time working			
Work-sharing			
Probationary staff not transferred to full-time contracts			
Non-renewal of temporary contracts			
Reduced training			
Educational leave			
Pay freeze			
Forgo holiday pay			
Forgo bonus pay			
Pay cut			

Further comments:

**Q.3. Have these policies had a disproportionate effect on ethnic minorities? (Please tick the appropriate box.)**

<b>Policy</b>	<b>Yes</b>	<b>No</b>	<b>Not applicable</b>
Recruitment freeze			
Voluntary early retirement			
Voluntary redundancy			
Compulsory redundancy			
Voluntary furlough			
Compulsory furlough			
Unpaid holiday/leave			
Short-time working			
Shorter working week			
Fewer shifts per month			
Part-time working			
Work-sharing			
Probationary staff not transferred to full-time contracts			
Non-renewal of temporary contracts			
Reduced training			
Educational leave			

Policy	Yes	No	Not applicable
Recruitment freeze			
Voluntary early retirement			
Voluntary redundancy			
Compulsory redundancy			
Voluntary furlough			
Pay freeze			
Forgo holiday pay			
Forgo bonus pay			
Pay cut			

Further comments:

**Q.4. How acceptable to your members are the different policies listed below? Please consider whether the policy in question would be accepted under normal operating conditions, would only acceptable as a short-term response to the current crisis, or is unacceptable under any circumstances. (Please tick the appropriate box.)**

Policy	Acceptable under normal circumstances	Only acceptable as a short-term/crisis measure	Unacceptable under any circumstances
Recruitment freeze			
Voluntary early retirement			
Voluntary redundancy			
Compulsory redundancy			
Voluntary furlough			
Compulsory furlough			
Unpaid holiday/leave			
Short-time working			
Shorter working week			
Fewer shifts per month			
Part-time working			
Work-sharing			
Probationary staff not transferred to full-time contracts			
Non-renewal of temporary contracts			
Reduced training			
Educational leave			
Pay freeze			
Forgo holiday pay			
Forgo bonus pay			
Pay cut			
Employee share ownership plan (ESOP)			

Further comments:

**Q.5. What policies should national governments pursue to support the civil aviation industry during the current crisis? Consider the following policies and tick the appropriate response, where SD = strongly disagree, D = disagree, N = neither agree nor disagree, A = agree and SA = strongly agree:**

<b>Policy</b>	<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>
Contribution to pension funds for early retirement					
Funding for severance pay					
Low cost loans to civil aviation employees					
Payments to partially cover short-time working					
Payments to fully cover short-time working					
Extending unemployment benefits					
Funding for medical/health insurance					
Funding for retraining programmes					
Financial compensation to airlines for loss of traffic					
Financial compensation to airports for loss of business					
Financial compensation to other companies (e.g. air traffic services, catering, aircraft manufacturers, etc)					
Financial support to airlines for higher insurance costs					
Financial support to airlines/airports for improved security					
Relaxation of foreign ownership rules					
Protect services to remote communities					
Promote mergers/take-overs/consolidation					
Initiatives to promote social dialogue					

**Further Comments:**

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## Sectoral working papers

	<i>Year</i>	<i>Reference</i>
New Technology in Banking and Insurance: Relative Provisions and Collective Agreements (Edith Epstein)	1985	SAP 4.1/WP.1
The Socio-Economic Implications of Structural Changes in Plantations in Asian Countries (K.N. Sircar, J.P. Sajhau, A. Navamukundan, R. Sukarja) <sup>1</sup>	1985	SAP 2.1/WP.2
The Socio-Economic Implications of Structural Changes in Plantations in African Countries (J.A. Lugogo, L.A. Msambichaka and M.S.D. Bagachwa, J.A. Dadson, K. Tano)	1986	SAP 2.2/WP.3
Las implicaciones socioeconómicas de los cambios estructurales en las plantaciones de países de América latina y del Caribe (E. Torres-Rivas, M. Chiriboga, T.F. Clarke)	1986	SAP 2.3/WP.4
The Formulation and Implementation of Housing Policy in Sri Lanka: The origin and implications of the “Million Houses Programme” (Marni Pigott)	1986	SAP 2.4/WP.5
Labour and Social Effects of Restructuring in the Iron and Steel Industry (Oleg Stepanov)	1986	SAP 1.1/WP.6
The Teller and the Terminal: The Effects of Computerisation on the Work and on the Employment of Bank Tellers (Michael Bell)	1988	SAP 4.2/WP.7
Social and Economic Effects of El Cerrejon Coal Project in Colombia (James Jonish)	1987	SAP 2.5/WP.8
Income of Workers in the Hotel, Catering and Tourism Sector (A. Faymann)	1987	SAP 6.1/WP.9
Social and Labour Effects of Computer-Aided Design and Computer-Aided Manufacturing (CAD/CAM) (Karl-H. Ebel and Erhard Ulrich)	1987	SAP 1.2/WP.10
La participation des femmes aux coopératives (D. Mavrogiannis)	1987	SAP 5.1/WP.11
La mobilisation de l'épargne rurale par les institutions de type coopératif et son impact sur le développement local dans sept pays africains – synthèse de sept études de cas: Burkina Faso, Cameroun, Egypte, Nigeria, Rwanda, Togo, Zimbabwe (Gilbert Renard)	1987	SAP 5.2/WP.12

<sup>1</sup> Out of print.

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Rural Savings Mobilisation by Co-operative Institutions and its Impact on Local Development in Seven African Countries – Synthesis of Seven Case Studies: Burkina Faso, Cameroon, Egypt, Nigeria, Rwanda, Togo, Zimbabwe (Gilbert Renard)	1988	SAP 5.2/WP.12
Coopératives à buts multiples dans les régions rurales des pays en développement (Albert Benjacov) <sup>2</sup>	1987	SAP 5.3/WP.13
Social and Economic Conditions in Plantation Agriculture in Kenya – Proceedings of a Tripartite Workshop organised by the International Labour Office at Egerton University College, Njoro, Kenya, 4-8 May 1987 (J.P. Sajhau)	1988	SAP 2.6/WP.14
Productivity and its Impact on Employment and on the Working and Living Conditions of Iron and Steel Workers (Oleg Stepanov)	1988	SAP 1.3/WP.15
Social and Economic Implications of Tea Processing – The Experiences of India and Kenya (B. Sivaram and G.A. Orao Obura)	1989	SAP 2.7/WP.16
Economic and Social Implications of Sugar Cane Processing in Developing Countries (T. Hannah, International Sugar Organization)	1989	SAP 2.8/WP.17
Social and Labour Consequences of Economic and Technological Change in Civil Aviation (A. Gil)	1989	SAP 2.9/WP.18
Les implications socio-économiques de la transformation primaire du coton en Afrique francophone (M. de Sahb)	1989	SAP 2.10/WP.19
Socio-economic Implications of Primary Processing of Plantation Crops in Malaysia. Rubber and Palm-oil (M. N. Navamukundan)	1989	SAP 2.11/WP.20
Production, Employment and Wages in the Coffee Processing Sector of Brazil (G. Maia Gomes)	1989	SAP 2.12/WP.21
Social and Labour Aspects of Urban Passenger Transport in Selected African Countries (A. Gil)	1989	SAP 2.13/WP.22
Petroleum Training in Algeria and Nigeria (J. McLin)	1989	SAP 2.14/WP.23
Training and Technological Development in the Petroleum Sector: The cases of Norway and Brazil (Jan Erik Karlsen and Henrique Rattner)	1989	SAP 2.15/WP.24

<sup>2</sup> Out of print.

Les coopératives et l'auto-assistance mutuelle face à la pauvreté urbaine dans les pays en développement (C. Jacquier)	1989	SAP 5.4/WP.25
Female Participation in the Construction Industry (J. Wells)	1990	SAP 2.16/WP.26
The Social Protection of Artists and Performers: The Situation in Selected Industrialised Countries (Jean-Pierre Dumont, Annie-Paule Gollot and Francis Kessler)	1990	SAP 4.3/WP.27
La protection sociale des artistes: la situation dans quelques pays industriels (Jean-Pierre Dumont, Annie-Paule Gollot et Francis Kessler)	1990	SAP 4.3/WP.27
Technological Change in the Iron and Steel Industry and its Effect on Employment and Training (S. Moinov)	1990	SAP 2.17/WP.28
Workers' Housing Co-operatives in Turkey: A Qualitative Evaluation of the Movement (A. S. Ozüekren)	1990	SAP 2.18/WP.29
Socio-Economic Conditions in Plantations in India: Proceedings of a National Tripartite Workshop (International Labour Office)	1990	SAP 2.19/WP.30
L'emploi dans l'industrie pétrolière (Inès Lemarie et Christophe Barret)	1990	SAP 2.20/WP.31
Les tendances de l'emploi, de la production et du commerce dans la filière textile: Situation actuelle et perspectives (Marcel de Sahb)	1990	SAP 2.21/WP.32
The Role of Petroleum Industries in Promoting National Development: Report of a Latin American Regional Symposium (Laura Randall)	1990	SAP 2.22/WP.33
The Internationalisation of Print: Trends, Socioeconomic Impact and Policy (Richard McArthur)	1990	SAP 2.23/WP.34
The Problems of Women Teachers in Technical and Vocational Education in Kenya, Tanzania and Zambia: An Exploratory Report (Kathleen Lynch)	1990	SAP 4.4/WP.35
Safety and Health Problems in Small and Medium Scale Textile Enterprises in Five Developing Countries (L. Li)	1990	SAP 2.24/WP.36
The Status of Women Teachers in Southern Africa (Catherine Gaynor)	1990	SAP 4.5/WP.37
Socio-Economic Conditions in Plantations in Tanzania: Proceedings of a National Tripartite Workshop organised by the International Labour Office at Morogoro, 23-27 April 1990 (Edited by J.P. Sajahau)	1990	SAP 2.25/WP.38

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Adjustment and Restructuring in Plantations: The Case of Sugar-cane in Mauritius and Negros Occidental (Philippines) (J.M. Paturau (Mauritius) and T.S. Untalan (Negros Occidental))	1990	SAP 2.26/WP.39
The communication of phonograms to the public: Remuneration of performers and producers (Pierre Chesnais)	1991	SAP 4.6/WP.40
Iron and Steel Producers: Fourteen of the Smaller Players (Stephan Moinov)	1991	SAP 2.27/WP.41
Professional and Managerial Staff: Their Place in the Labour Relations System of Canada and the United States (Michael Bendel)	1991	SAP 4.7/WP.42
Producers' Small Scale Industrial Co-operatives Some Case Studies from Developing Countries (Malcolm Harper)	1991	SAP 5.5/WP.43
La condition de l'artiste (André Nayer and Suzanne Capiou)	1991	SAP 4.8/WP.44
Gestion des ressources humaines dans le secteur public: Réflexion méthodologique à partir de l'étude de quelques projets de coopération technique conduits par le Bureau international du Travail (Joël Cauden et José Trouvé)	1991	SAP 4.9/WP.45
Labour Market Flexibility: The Challenge Facing Senior Medical Officers in New Zealand (Ian Powell)	1991	SAP 4.10/WP.46
Crise et assainissement des services publics africains. Le cas des services de fourniture d'eau et d'électricité et des transports au Cameroun, Niger et Sénégal (Patrick Plane)	1991	SAP 4.11/WP.47
Manpower Aspects of Restructuring Railways in Developing Countries: A synthesis of six country case studies (A. Silverleaf)	1991	SAP 2.28/WP.48
Negotiating technological and structural change in Australia Post (R. Lansbury)	1992	SAP 4.12/WP.49
Women in scientific research in Australia: A case study (C. Macpherson)	1992	SAP 4.13/WP.50
Global information processing: The emergence of software services and data entry jobs in selected developing countries (S. Mitter and R. Pearson)	1992	SAP 4.14/WP.51
The construction industry in Brazil: Surviving the transition to a more competitive market (H. Zylberstajn)	1992	SAP 2.29/WP.52

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Human resource management issues in developing country public enterprises (petroleum/chemical sectors) (D.G.M. Cheshire)	1992	SAP 2.30/WP.53
The restructuring of the Japanese National Railways: Effects on labour and management (S. Watanabe)	1992	SAP 2.31/WP.54
El sector bancario argentino: El impacto de los cambios tecnologicos y estructurales sobre el trabajo y el empleo (J.C. Neffa)	1993	SAP 4.15/WP.55
An industry steels itself for change (S. Moinov)	1993	SAP 2.32/WP.56
Un atout pour la santé: La rémunération du personnel infirmier (A. Brihaye)	1993	SAP 4.16/WP.57
Les conditions d'emploi des travailleurs des plantations: Compte-rendu d'un atelier tripartite national (P. Egger)	1993	SAP 2.33/WP.58
Ajustement structurel, politiques agricoles et efforts d'adaptations paysannes en Côte d'Ivoire (M. Allechi, Y. Affou, D. Ngaresseum)	1993	SAP 2.34/WP.59
White-collar unionism in selected European countries: Issues and prospects (E. Kassalow)	1993	SAP 4.17/WP.60
Les enjeux des services bancaires: hommes, techniques et marchés (J. D'Alañon)	1993	SAP 4.18/WP.61
Occupational Safety and Health in the Food and Drink Industries (Shizue Tomoda)	1993	SAP 2.35/WP.62
Employed or Self-Employed? Contract Labour in the British Construction Industry (Julian Birch)	1993	SAP 2.36/WP.63
The effects of technological and structural changes on employment in major Irish banks (Noelle Donnelly)	1993	SAP 4.19/WP.64
La banque française en mutation: marché, profession, organisation, culture (E. Blaustein, M. Dressen)	1993	SAP 4.20/WP.65
Nurses' pay: A vital factor in health care (A. Brihaye)	1993	SAP 4.21/WP.66
Part-time and temporary employees in the Public Service in Japan (Seiichiro Hayakawa)	1993	SAP 4.22/WP.67

La situación de las mujeres docentes en centroamérica: Hacia la igualdad de oportunidades y de trato (Mafalda Sibille Martina)	1994	SAP 4.23/WP.68
Por la remuneración equitativa del personal de enfermería (A. Brihaye)	1994	SAP 4.24/WP.69
Privatization of public services and public utilities (C. Oestmann)	1994	SAP 4.25/WP.70
Les droits syndicaux des cadres: Une perspective internationale (Claire Dupont-Sakharov et Laure Frexinos)	1995	SAP 4.26/WP.71
Consequences for Management and Personnel of the Reorganization of Railways in the Russian Federation – 1990-1992 (Irene Valkova)	1994	SAP 2.37/WP.72
Trends and Perspectives in the Nursing Profession (Christine Hancock, James Buchan, Phil Gray; Cécile Fontaine; Sholom Glouberman; Tom Keighley)	1995	SAP 4.27/WP.73
Trade union rights of managerial staff: An international perspective (Claire Dupont-Sakharov and Laure Frexinos)	1995	SAP 4.28/WP.74
Los derechos sindicales del personal dirigente: una perspectiva internacional (Claire Dupont-Sakharov and Laure Frexinos)	1995	SAP 4.29/WP.75
Productivity, employment and industrial relations in coal mines Two case studies from the Czech Republic and the Russian Federation (Edited by Norman S. Jennings)	1994	SAP 2.38/WP.76
Productivity, employment and industrial relations in coal mines. Three case studies from China, India and Zimbabwe (Edited by Norman S. Jennings)	1994	SAP 2.39/WP.77
Productivity, employment and industrial relations in coal mines. Three case studies from Australia, United Kingdom, United States (Edited by Norman S. Jennings)	1994	SAP 2.40/WP.78
Atmospheric pollution control: How much of a threat to coal? (Sonja Boehmer-Christiansen)	1994	SAP 2.41/WP.79
Job satisfaction and decentralization: The effects of systemic change on Swedish comprehensive schoolteachers from 1988 to 1993 (Roger Ellmin)	1995	SAP 4.30/WP.80
Contract labour in Malaysian plantation, construction and sawmilling industries: A survey report (Lee Kiong Hock and A. Sivananthiran)	1995	SAP 2.42/WP.81

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Sectoral trends in world employment (Jaroslaw Wieczorek)	1995	SAP 2.43/WP.82
Les femmes enseignantes dans l'enseignement technique et professionnel au Bénin, en Côte d'Ivoire, au Mali, au Sénégal: Une étude comparative (Soledad Perez)	1995	SAP 4.31/WP.83
Occupational stress and burn-out of teachers: A review (Tom Cox and Amanda Griffiths)	1995	SAP 4.32/WP.84
Gender and employment on sugar cane plantations in Tanzania (Marjorie Mbilinyi with Ave Maria Semakafu)	1995	SAP 2.44/WP.85
Various forms of employment in the food and drink industries (Shizue Tomoda)	1995	SAP 2.45/WP.86
L'ajustement dans le secteur public et la humaines: gestion des ressources le cas du Sénégal (Abdoul Aziz Tall)	1995	SAP 4.33/WP.87
Privatization in Mauritius: Semi-privatization, Counter-privatization and Closure (P. Ujoodha)	1995	SAP 4.34/WP.88
L'ajustement structurel dans le secteur public et la gestion des ressources humaines: Le cas du Mali (Mohamed Moustapha Sissoko)	1995	SAP 4.35/WP.89
Document d'orientation sur les politiques de privatisation du secteur public (Alain Adérito Sanches)	1995	SAP 4.36/WP.90
Women workers in manufacturing, 1971-91 (Shizue Tomoda)	1995	SAP 2.46/WP.91
Adjustment in the public sector and management of human resources in Mauritius (Raj Mudhoo)	1995	SAP 4.37/WP.92
Privatization in the iron and steel industry (Stephan Moinov)	1995	SAP 2.47/WP.93
Privatization and human resource issues in the Caribbean sugar industry (Clive Y. Thomas)	1995	SAP 2.48/WP.94
Foreign labour in the Malaysian construction industry (A.-R. Abdul-Aziz)	1995	SAP 2.49/WP.95
Recherche de la productivité et rentabilité dans le secteur bancaire: théorie, pratiques et conséquences sur la gestion des ressources humaines (Edgar Blaustein et Marnix Dressen)	1995	SAP 4.38/WP.96

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Proceso de privatización en Argentina y Brasil: Consecuencias en materia de mercado de trabajo y desempeño empresarial Prácticas utilizadas para el ajuste de personal (Enrique Saravia)	1995	SAP 2.50/WP.97
Deregulation of Road Freight Transport: Labour Implications (Yukari Suzuki)	1996	SAP 2.51/WP.98
Improving working conditions and increasing profits in forestry (Kiki Johansson and Bernt Strehlke)	1996	SAP 2.52/WP.99
ILO industrial committees and sectoral activities: An institutional history (Edward Weisband)	1996	SAP 2.53/WP.100
Productivity improvement and labour relations in the tea industry in South Asia (B. Sivaram)	1996	SAP 2.54/WP.101
Egalité des chances entre les hommes et les femmes des catégories cadres et professionnelles (J. Laufer)	1996	SAP 4.39/WP.102
Health care personnel in Central and Eastern Europe (J. Healy/C. Humphries)	1996	SAP 4.40/WP.103
Safety and health of meat, poultry and fish processing workers (S. Tomoda)	1996	SAP 2.55/WP.104
Labour migration in the construction industry in Latin America and the Caribbean (Edmundo Werna)	1996	SAP 2.56/WP.105
Foreign construction workers in Singapore – School of building and estate management – The National University of Singapore (George Ofori)	1996	SAP 2.57/WP.106
Ethique des affaires dans les industries THC (textile, habillement, chaussures): Les codes de conduite (J.P. Sajahau)	1997	SAP 2.58/WP.107
Health Care Personnel in Central and Eastern Europe (Russian version) (J. Healy/C. Humphries)	1997	SAP 4.41/WP.108
Responsible Care and related voluntary initiatives to improve enterprise performance on health, safety and environment in the chemical industry (Kevin Munn)	1997	SAP 2.59/WP.109

Business ethics in the textile, clothing and footwear (TCF) industries: Codes of Conduct (J.P. Sajhau)	1997	SAP 2.60/WP.110
Trayectoria de modernización y calificación en la industria siderúrgica: Perspectivas para el Siglo 21 Estudio de caso de una planta en México (Andrés Hernández, Anselmo García y Leornad Mertens)	1997	SAP 2.61/WP.111
Steel in the new millennium: Nine case studies (Edited by Norman S. Jennings)	1997	SAP 2.62/WP.112
People, Forest and Sustainability: Social Elements of Sustainable Forest Management in Europe (Proceedings)	1997	SAP 2.63/WP.113
Strategies to reach the top for women in management: Perspectives from ASEAN (Sieh Lee Mei Ling)	1997	SAP 4.42/WP.114
The impact of climate change policies on employment in the coalmining industry (Cain Polidano)	1997	SAP 2.64/WP.115
Breaking through the glass ceiling: Women in management in Poland (Anna Fotyga) (forthcoming)	1998	SAP 4.43/WP.116
Rompiendo el techo de cristal: las mujeres en puestos de dirección en Argentina (A.M. Mass, M.A. Saez, S. García y L. Cukierman) (forthcoming)	1998	SAP 4.44/WP.117
Breaking through the glass ceiling: Women in management in Argentina (A.M. Mass, M.A. Saez, S. García and L. Cukierman) (forthcoming)	1998	SAP 4.45/WP.118
Environmental protection and its employment effects on miners in small and artisanal mines in Zimbabwe (Marilyn Carr, David Laurence and Richard Svotwa)	1998	SAP 2.65/WP.119
The impact of globalization on the construction industry Activities of contractors and workers across borders (Ryo Kawano)	1998	SAP 2.66/WP.120
The machinery, electrical and electronic industries in numbers (Maryke Dessing and Olivier Mutter)	1998	SAP 2.67/WP.121
The Dutch flower sector: Structure, trends and employment (Paul Elshof)	1998	SAP 2.68/WP.122
Indigenous peoples and oil development: reconciling conflicting interests (Manuela Tomei)	1998	SAP 2.69/WP.123

Current trends in the flexible organization of working time in Germany: A survey of recent internal agreements in the engineering industry (Christiane Lindecke and Steffen Lehndorff)	1998	SAP 2.70/WP.124
Survival of the flexible in the global economy: Employment security and shopfloor re-organization in two Massachusetts metalworking firms (Bob Farrant)	1998	SAP 2.71/WP.125
The impact of flexible labour market arrangements in the Australian metals and engineering industries (J. Buchanan)	1998	SAP 2.72/WP.126
Employment and industrial relations issues in the cigarette manufacturing industry (Miriam Szapiro)	1998	SAP 2.73/WP.127
Agrarian transition in Viet Nam (Vali Jamal and Karel Jansen)	1999	SAP.2.74/WP.128
Employment and working conditions in the Colombian flower industry (Stefano Farné)	1999	SAP 2.75/WP.129
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Estudio sobre reestructuración portuaria – impacto social Puerto de Buenos Aires (Argentina) (Martín Sgut)	1999	SAP 3.1/WP.131
Estudio sobre reestructuración portuaria – impacto social Puerto de Valparaíso (Chile) (Rodrigo García Bernal)	1999	SAP 3.2/WP.132
Estudio sobre reestructuración portuaria – impacto social Puerto de Buenaventura (Colombia) (Gerardo Solano Gomez y Nazly Fontalvo de Zapata)	1999	SAP 3.3/WP.133
Estudio sobre reestructuración portuaria – impacto social Puerto del Callao (Perú) (Manuel Mogollón Venegas)	1999	SAP 3.4/WP.134
Estudio sobre reestructuración portuaria – impacto social Puerto de Veracruz (México) (Jaime R. Sanchez Diéz)	1999	SAP 3.5/WP.135
L'industrie du textile-habillement en Tunisie: Les besoins des chefs d'entreprise et les conditions de travail des femmes dans les PME (Riad Meddeb)	1999	SAP 2.77/WP.136
Child labour in small-scale mining: Examples from Niger, Peru & Philippines (Edited by Norman Jennings)	1999	SAP 2.78/WP.137

Employment and working conditions in the Ecuadorian flower industry (Zonia Palán & Carlos Palán)	1999	SAP 2.79/WP.138
The world cut flower industry: Trends and prospects (Gijsbert van Liemt)	1999	SAP 2.80/WP.139
Le travail des enfants dans les petites exploitations minières du Niger: Cas des sites de natron, de sel, de gypse et d'orpaillage (Soumaïla Alfa)	1999	SAP 2.81/WP.140
Trabajo infantil en el centro minero artesanal de Mollehuaca – Huanuhuanu – Arequipa – Perú (Zoila Martínez Castilla)	1999	SAP 2.82/WP.141
Estudio monográfico sobre la explotación minera pequeña – Ejemplo de San Simón (Bolivia) (Thomas Hentschel, Diógenes Roque y Evelyn Taucer)	1999	SAP 2.83/WP.142
Structural adjustment and agriculture in Guyana: From crisis to recovery (John Loxley and Vali Jamal)	1999	SAP 2.84/WP.143
Statistics on Public Sector Employment: Methodology, Structures and Trends (Messaoud Hammouya)	1999	SAP 4.46/WP.144
Statistiques de l'emploi dans le secteur public: Méthodologie, structures et tendances (Messaoud Hammouya)	1999	SAP 4.47/WP.145
Actors and the international audiovisual production industries (International Federation of Actors – FIA)	2000	SAP 4.48/WP.146
Risks and Dangers in Small-Scale Fisheries: An Overview (Menakhem Ben-Yami)	1999	SAP 3.6/WP.147
Impact of the flower industry in Uganda (Patrick K. Asea and Darlison Kaija)	2000	WP.148
Structural adjustment and agriculture in Uganda (John K. Baffoe)	2000	WP.149
Homeworkers: Towards improving their working conditions in the textile, clothing and footwear industries (Catherine Barne)	2000	WP.150
Trends in feminization of the teaching profession in OECD countries 1980-95 (Cathy Wylie)	2000	WP.151
The cut-flower industry in Tanzania (Haji Hatibu Haji Semboja, Rhoda Mbelwa and Charles Bonaventura)	2000	WP.152
Competition policy and international labour and social relations (postal and telecommunications services, water, gas, electricity) (Claude Duchemin)	2000	WP.153

Politique de la concurrence et relations sociales internationales (postes, télécommunications, eau, gaz, électricité) (Claude Duchemin)	2000	WP.154
Approaches to labour inspection in forestry – problems and solutions	2000	WP.155
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 2000-11-07 (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
Code of practice on safety and health in the non-ferrous metals industries	2001	WP.168

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Le rôle des initiatives volontaires concertées dans la promotion et la dynamique du dialogue social dans les industries textiles, habillement, chaussure (Stéphanie Faure)	2001	WP.169
The role of joint voluntary initiatives in the promotion and momentum of social dialogue in the textile, clothing and footwear industries (Stéphanie Faure)	2001	WP.170
La situation sociale des artistes-interprètes de la musique en Asie, en Afrique et en Amérique latine (Jean Vincent)	2001	WP.171
The social situation of musical performers in Asia, Africa and Latin America (Jean Vincent)	2001	WP.172
Recueil de directives pratiques sur la sécurité et la santé dans les industries de métaux non-ferreux	2001	WP.173
Repertorio de recomendaciones prácticas sobre la seguridad y la salud en las industrias de los metales comunes no ferrosos	2001	WP.174
Privatization of municipal services: Potential, limitations and challenges for the social partners (Brendan Martin)	2001	WP.175
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