

Extended Working Hours Review

Final Report: 27 February 2004

Dear Minister

It is with pleasure that I submit our report on extended working hours, the implications for public policy reform, and our recommendations for your consideration.

The report gives an overview of the actual and potential effects of extended working hours on individuals, families and communities based on the findings of empirical studies and the views of key stakeholders, employees and their families and peak bodies. It outlines the major approaches that have been adopted in other jurisdictions, which indicate the complexities associated with determining the most effective means of addressing extended hours.

Any measure aimed at minimising the impact of extended hours has implications for the differing needs and aspirations of employees, employers and the community. Nevertheless, the majority of the Review Panel felt that there was a solution although it may not be one which is perfect or which satisfies everyone. This is contained in the recommendations of Chapter 5 of the report.

Where individual members of the Review Panel held views dissenting from the majority on specific issues, these opinions and the reasons for them, have been included.

I would like to take this opportunity to thank officers of the Department of Consumer and Employment Protection for research and executive support.

Finally, given that issues surrounding extended working hours are of considerable community concern, I urge you to refer the recommendations to the Commission for Occupational Safety and Health for implementation.



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26 February 2004



Ms Helen Creed
National President
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Chapter 1 - Introduction

Background

1. Since the mid eighties, the length of working hours has been a subject of interest to researchers, public policy makers, peak employee, employer and industry bodies, as well as governments. Current hours of employment and modes of engagement in several industrialised countries now bear little resemblance to the so-called “traditional” working day that commenced at 9.00 and ended at 5.00pm on weekdays.
2. Interest in extended working hours is shaped by concerns about its adverse effects on workers in terms of their health and safety, and their familial and social relationships, as well as its impact on the cohesion and well-being of the community.
3. Some overseas jurisdictions have regulated extended working hours in order to minimise its detrimental health and social effects on workers, their families and communities.

Review Panel

4. In May 2003, the Minister for Consumer and Employment Protection established an Extended Working Hours Review Panel to receive and consider public comment on the extended working hours issue and to make recommendations for Government action. The Review Panel comprised:

Associate Professor Laurence Hartley (Chair)

School of Psychology
Murdoch University

Ms Helen Creed

National President
Australian Liquor, Hospitality and Miscellaneous Workers Union

Mr Patrick Gilroy AM

Chief Executive Officer
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Mr David Todd

Divisional Manager, Health and Safety
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5. Administrative and research support for the Panel was provided by the Strategy Division of the Department of Consumer and Employment Protection.

Terms of Reference

6. The Terms of Reference for the Review Panel were as follows:

The Review Panel is to receive and consider public comment and make recommendations for the improvement of the State's occupational safety and health framework that applies to issues arising from extended working hours. The panel is to have regard to:

- i. The incidence of extended working hours in specific industries / occupations or sectors of the Western Australian community.
- ii. The extent and nature of demonstrated health and safety issues, such as fatigue, for employees working extended hours.
- iii. Specific models and/or general structures to provide guidance on the management of, and if necessary specific limits on working hours where there is strong evidence of serious health and safety issues in ii above.
- iv. The extent to which instruments (for example codes of practice) may be utilised in standard generic form or whether they are better tailored to specific industries or occupations.
- v. The lessons to be derived from and the transferability of, instruments already applied to problem areas, e.g, road transport and medical interns in teaching hospitals.
- vi. Proposed action to be taken by government and industry for the development, implementation and monitoring of recommended models along with resource implications.
- vii. Emerging issues arising from extended working hours whether they be industry / occupation specific or more generally impacting on the health of individual workers, their families or their community.

Review Conduct

7. This report presents the findings of the Review Panel's appraisal of the major issues pertaining to extended working hours as they relate to the Terms of Reference. In conducting the review, the Panel used primary and secondary sources of data to obtain an overview of extended working hours and its effects in Western Australia.
8. Statistical information collated by the Australian Bureau of Statistics (ABS) on working hours and data collected by other agencies on employee preferences have been summarised to indicate trends in working hours in Western Australia. Findings from relevant ABS surveys and others undertaken by peak bodies as part of their response to this review or research institutes that have analyzed working time arrangements and employee preferences have been included.

9. In order to consult with interested parties, employees, peak employer bodies and key stakeholders, the Review Panel called for public submissions on a discussion paper released by the Department of Consumer and Employment Protection in July 2003. Oral hearings were also conducted.
10. The review was advertised in the West Australian and regional newspapers. The advertisements invited interested persons to make submissions on issues relevant to the terms of reference or meet with the Review Panel in Perth, Bunbury, Kalgoorlie or Karratha. Members of Parliament representing regional areas visited by the Review Panel were contacted, and in some instances resulted in meetings that contributed to the discussions about the effects of extended working hours on occupational, health and safety issues as well as local communities
11. The Review Panel received over 70 written submissions and met with more than 60 people, in groups and individually. Oral submissions were received through intensive face-to-face discussions about employee experiences of extended working hours, as well as the strengths and weaknesses of the proposed options. Workers and employers in both the private and public sectors across a broad cross-section of industries, and employee and employer organisations participated in the review process.
12. In addition the findings of recent major studies into the effects of extended working hours and alternative approaches to addressing some of these impacts were assessed. Key findings within this literature are described, providing a contextual framework with which to appraise trends emerging in Western Australia. To some extent, this has resulted in the uneven treatment of general themes and issues in the report.
13. Some topics are discussed at length, while others are mentioned in passing. This is not indicative of their relative importance; it merely reflects the greater interest that some sectors have in addressing extended working hours. Moreover, the Review Panel has not investigated the merits of particular claims that have been made in both written and oral submissions or in the literature reviewed.
14. The report does not purport to be a comprehensive evaluation of the effects of extended working hours. Instead, it has sought to identify salient themes emerging from an occupational safety and health perspective. As a scoping and evaluative report, it gives an overview of issues and emerging trends in relation to working hours and working time arrangements.

Introduction

Submissions

15. The Review Panel received 79 responses, of which 71 were written submissions representing a broad range of occupations, industries and community sectors. Of the total, 13 were from individuals who described the effects of long working hours on their partners, families and local communities. Peak employer and employee bodies, as well as industry bodies and public sector agencies, addressed the various effects of long working hours from a sectoral or organisational perspective. In some instances, these submissions included case studies and examples of the effects of extended working hours.
16. The Review Panel acknowledges the written and oral submissions of individuals, particularly spouses of employees, who wrote about the emotional distress caused by long working hours. Attachment I provides a list of written submissions received.
17. While some submissions specifically addressed the options and key questions outlined in the discussion paper, a number referred only to specific matters of interest. Nonetheless, there was general recognition that the adverse effects of extended working hours required attention and action.
18. However, there was less agreement about the form and nature of such action or intervention. In some submissions lodged by peak employer and industry bodies self-regulation was seen as an appropriate means of addressing extended working hours with Government intervention limited to educative strategies. Other submissions advocated an explicit mandatory standard on daily, weekly or annual maximum hours as being necessary to halt the trend towards longer working hours.
19. Notwithstanding this divergence about the most appropriate course of action, the importance of work/life balance surfaced as a recurrent theme in both written and oral submissions.
20. Recommendations, comments and observations made in written and oral submissions have been incorporated throughout the Report. The identity of individuals who made submissions has not been disclosed in the Report. However, peak employer, employee and industry bodies are identified since their observations and comments contribute to public discussion of the implications of options that address the effects of extended working hours.

Structure of Report

21. Current demographic and statistical trends about working hours are outlined in Chapter 2. Employee preferences regarding working hours are summarised, as is the survey data provided in some submissions.
22. Chapter 3 delineates the findings of the Review Panel about the effects of extended working hours on employees, families and the wider community. It incorporates the observations and comments that were made in written and oral submissions, as well as major themes that surfaced in the review of literature.

23. Australian and overseas jurisdictions are also addressing the effects of extended working hours. The approaches that have been implemented, as well as models that are currently being considered are described in Chapter 4. In this chapter, the views or preferences expressed in submissions for any particular option or mechanism are also outlined.
24. The recommendations of the Review Panel are set out in Chapter 5.

Chapter 2 - Trends in Working Hours

25. Under its terms of reference the Review Panel was required to have regard to “the incidence of extended working hours in specific industries / occupations or sectors of the Western Australian community”. The Review Panel evaluated statistical data on trends about working arrangements and considered the findings of empirical studies and industry specific information contained in some submissions. As noted in the Discussion Paper¹, there are limited data available that specifically relate to the extent and characteristics of working hours in Western Australia. The information available from the ABS provides only a broad insight into patterns of working hours.
26. Before proceeding to examine trends in working hours, it is apposite to consider current working arrangements. The past twenty years have seen significant changes in the patterns of working time arrangements across Australia. There has been a sustained shift away from the “traditional” 38-hour working week that may be attributed in part to increases in part-time employment, the participation of women in the labour market and a plethora of new working time arrangements that are briefly described.
27. Reviews of trends in working hours generally note that there have been three main types of change in working time duration in recent years. The first concentrates working time into a longer span or shift; the second involves shorter spans or blocks of work that are attractive to part-time workers; and the third relates to the duration of the contract for work, rather than the length of the working day or week itself². Examples of variations to the duration of hours include “compressed working weeks” where total weekly hours are compressed into a smaller number of days or shifts of longer working hours.
28. Some of the trends and developments in relation to working arrangements, particularly extended working hours, relate to the distribution of hours. Shift work is one example of this and involves the working of two or more periods within the same 24-hour period by different employees, usually organised in crews or teams. The general aim is to increase the coverage of working time within that workplace, occupation or industry beyond the working day of the individual employee.
29. While work patterns such as part-time work, flex hours, job-sharing and other work arrangements are arguably new working time arrangements, the ability to work extended or excessive hours is not a new phenomenon given the use and reliance on overtime provisions.

¹ Consumer and Employment Protection, Department of (2003)

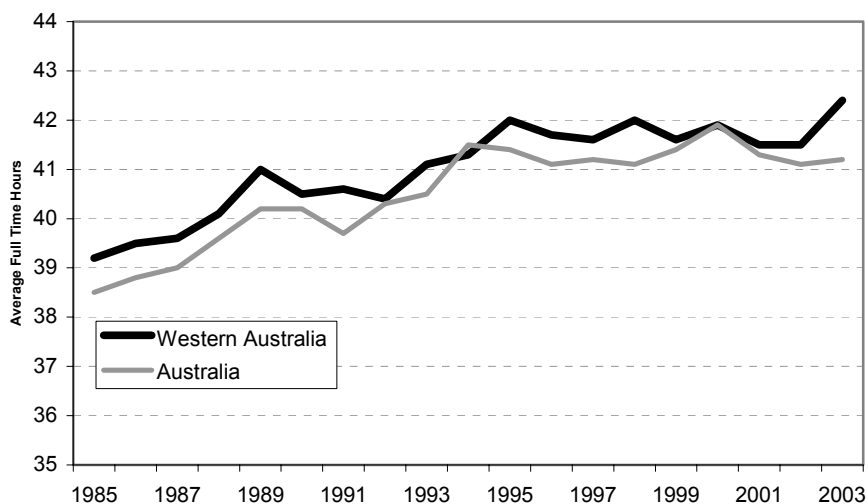
² See for example, Neathey and Arrowsmith (2001), Callus and Lansbury (2002) and Watson et al. (2003).

30. Available Western Australian and national data on working hours have been reviewed in light of these working time arrangements with a view to addressing these questions:
- what hours are being worked;
 - who is working longer hours; and
 - why are people working longer hours.

What Hours are Being Worked?

31. Chart 1 shows the average weekly hours worked by full-time employees³ have increased by approximately two hours from 1985 to 2003. It also indicates average hours worked by full-time employees increased sharply between 1985 and 1994 and then stabilised at approximately 42 hours per week. The Western Australian average has been higher than the national average in all but two of the past 18 years. The most recent data shows that in 2003, after a period of decline, the average hours worked by full-time employees increased moderately nationally, and significantly in Western Australia.

Chart 1: Average Hours Worked, Full Time Employees, Western Australia and Australia 1985 - 2003



Source: ABS Labour Force Survey Cat. 6291 Unpublished)

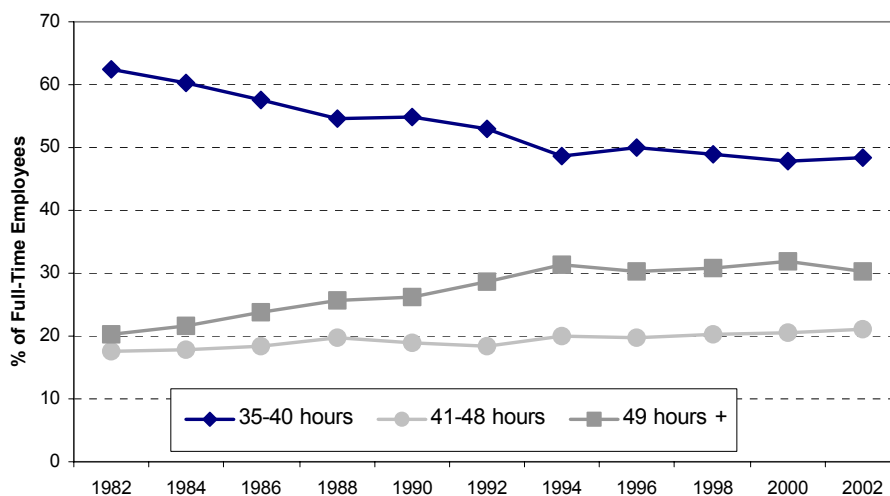
32. Chart 2 shows that the proportion of full-time employees working an average of 49 hours or more per week has increased nationally from 20.2% in 1982 to 30.3% in 2002⁴. While a part of this increase may be attributed to changes in the composition of the workforce, such as the trend towards part-time employment, the increase in the proportion of employees working extended hours is marked. It is likely that the national data reflect trends in Western Australia.

³ Employees working more than 35 hours per week.

⁴ See also ABS November 2000, *Working Arrangements Survey* (unpublished) and ABS 2000, *Survey of Employment Arrangements and Superannuation*, and Consumer and Employment Protection (2003)

Trends in Working Hours

Chart 2: Proportion of Full-Time Employees Working Various Hours of Work, Australia, 1982 - 2002

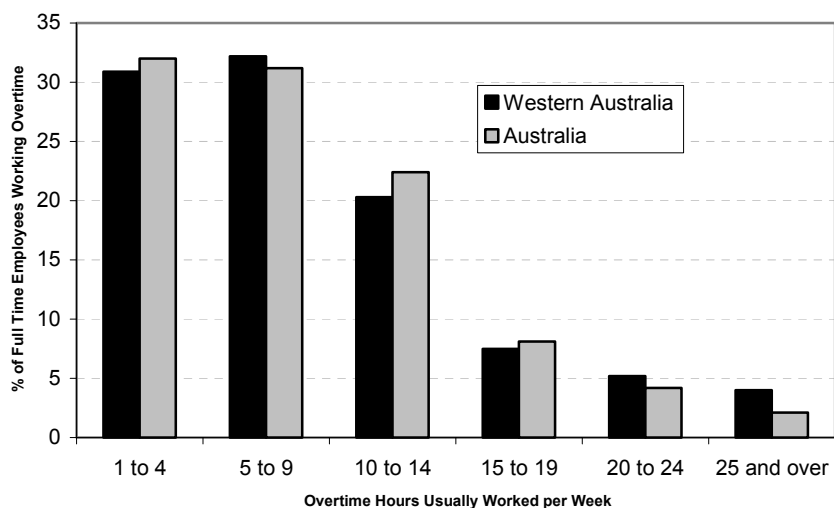


Source: ABS August 2002, Labour Force Australia 6203.0

Overtime

33. The incidence of generally higher than average working hours in Western Australia is also evident in patterns of overtime. Chart 3 shows the distribution of overtime hours amongst full time employees who work overtime. In 2000 a comparatively high proportion of Western Australian employees working overtime usually worked 20 or more hours of overtime each week – 9.2% in Western Australia compared to 6.3% nationally. In 2000 the proportion of Western Australian employees who usually worked 25 hours or more of overtime each week (4.1%) was twice the national average.

Chart 3: Hours of Overtime Usually Worked per Week, Western Australia and Australia, 2000



Source: ABS Working Arrangements Cat 6342.0 (Unpublished)

34. The Review Panel notes that the Australian population, including the Western Australian population is ageing. This has contributed to discussions in Australia and other overseas countries about matters such as superannuation, removal of a mandatory retirement age, mechanisms to enable employees to access phased retirement options and enable workplaces to retain their expertise in private, public and community sectors. It is envisaged that Commonwealth and State Government deliberations and actions that seek to address the implications of the ageing of the labour market will shape trends in working time arrangements.

Who is Working Long Hours?

35. Available Western Australian and national data on the patterns of working hours, information provided in submissions and findings of empirical studies were appraised to determine trends in working hours across industries and occupations in Western Australia.

Extended working hours by industry

36. Statistical information collated by the ABS indicates considerable diversity in average hours worked by full time employees within industry divisions. Table 1 shows the average hours worked by Western Australian full time employees⁵ in 2003 ranged from 48.4 hours per week in the mining industry to 36.8 hours in Government Administration and Defence. Average weekly hours are comparatively high in:
- Mining;
 - Agriculture, Forestry and Fishing;
 - Accommodation, Cafes and Restaurants;
 - Transport and Storage; and
 - Construction.
37. Table 1 also shows that average hours worked in Health and Community Services increased from 36.9 hours in 2000 to 39.8 in 2003.

⁵ Employed persons who usually work 35 hours or more a week (in all jobs).

Trends in Working Hours

Table 1: Average Hours Worked, Full Time Employees, Western Australia 2000 – 2003

	2000	2001	2002	2003
Agriculture, Forestry and Fishing	42.9	45.7	44.2	47.6
Mining	47.3	43.2	44.5	48.4
Manufacturing	40.8	41.7	41.5	42.1
Electricity, Gas and Water Supply	40.3	43.3	39.0	38.4
Construction	45.3	43.0	44.6	44.0
Wholesale Trade	42.3	42.1	44.3	42.7
Retail Trade	42.2	40.3	40.5	42.0
Accommodation, Cafes and Restaurants	44.8	42.5	45.2	45.6
Transport and Storage	43.5	42.1	43.0	44.7
Communication Services	35.2	37.6	37.4	37.8
Finance and Insurance	37.3	38.5	40.2	38.5
Property and Business Services	43.1	43.0	42.5	43.4
Government Administration and Defence	37.5	38.2	36.2	36.8
Education	42.3	42.1	41.6	42.3
Health and Community Services	38.6	38.9	37.5	39.8
Cultural and Recreational Services	39.5	40.8	38.3	38.2
Personal and Other Services	41.8	40.5	40.3	41.6
WA Average	41.9	41.5	41.5	42.4

Source: ABS Labour Force Survey Cat. 6291.55.001 (Unpublished)

38. With the exception of Construction, the average hours worked by full time employees increased during 2002 and 2003 in Mining, and Agriculture, Forestry and Fishing. Average hours being worked in these industries in 2003 appear to be at the higher end of each industry's historical range as shown in Chart 4.
39. Some submissions provided quantitative information on current working time arrangements. Material contained in a joint submission by the Chamber of Minerals and Energy of Western Australia (CME) and the Australian Mines and Metals Association (AMMA) indicate that amongst their members:
- nearly two thirds of employees work 12 hour shifts;
 - the most common average weekly working hours is 56 hours, reflecting the high proportion of fly-in/fly-out (FIFO) sites in Western Australia, most on a 2 weeks on, 1 week off roster;
 - the average hours worked was 47 hours; and
 - nearly half the sites surveyed operated on a FIFO basis.
40. Table 2 shows roster patterns amongst member companies of the CME and the AMMA in the mining sector.

Table 2: Roster Patterns Mining, Western Australia

Roster	% of employees
Even time ratio or lower: days worked less than or equal to days off	34
Higher than even time ratio, up to and including 2 weeks on and 1 week off: days worked greater than days off (Note: includes 9 days on, 5 days off roster – 4%)	37
Higher than 2 weeks on and 1 week off ratio, up to and including 3 weeks on and 1 week off (Note includes 5 days on, 2 days off roster – 15%)	24
Higher than 3 weeks on and 1 week off ratio: days worked greater than days off, beyond a 3 weeks on 1 week off roster	5

Source: CME Submission

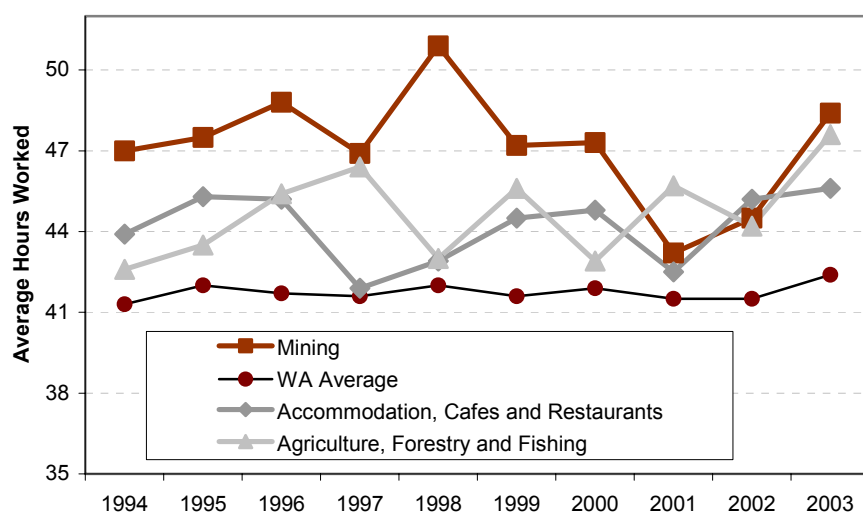
41. Information provided in submissions and hearings indicate that there are a variety of arrangements that fall within the broad category of shiftwork, including shift schedules that rotate on a daily or weekly basis as fixed shifts. Variations include how many hours are worked each shift; how many shifts are worked at a time; how many hours are worked in a given period; how much time off is allowed between day and night shifts; and how much overtime is worked.
42. Seasonal hours, where the duration and span of hours is dependant upon the time of year, with extended working hours required during particular periods to meet the requirements of farming, cray-fishing and fruit picking, was raised in some submissions as a factor affecting working time arrangements. It was noted that “these busy periods can be offset with periods of reduced activity...during alternate seasons”⁶ and the “important element in these seasonal tasks is that the weather dictates the work effort required to achieve economic outcomes”⁷.
43. Chart 4 shows trends in average weekly hours for selected industries over the past 10 years and indicates significant increases in average hours worked occurred in 2002 and 2003.

⁶ Public submission: WA Fruit Growers Association.

⁷ Public submission: WA Farmers Federation.

Trends in Working Hours

Chart 4:: Average Hours Worked, Australia, Full Time Employees, Selected Industries Western Australia, 1994 – 2003



Extended working hours by occupation

44. Table 3 shows the hours worked by all full-time employees in Australia, and indicates that nearly a quarter (23.5%) of all employees worked 50 or more hours per week.

Table 3: Working Arrangements full-time employees (excluding owner managers) – Proportion within occupation, Australia, 2000

	40 or more %	50 or more %	60 or more %
Managers and administrators	96.5	53.1	24.3
Professionals	79.9	29.2	10.9
Associate professionals	83.0	35.5	16.3
Tradespersons and related workers	74.9	17.9	6.5
Advanced clerical and service workers	61.7	11.2	3.7
Intermediate clerical, sales and service workers	62.1	13.7	5.0
Intermediate production and transport workers	76.9	29.2	13.3
Elementary clerical, sales and service workers	59.6	11.1	3.9
Labourers and related workers	64.9	15.2	6.1
TOTAL	73.4	23.5	9.5

Source: ABS Labour Force Survey November 2000 (Cat No 6342.0)

45. While there is some variation, it is clear long working hours are prevalent in most occupations, with a concentration amongst professional and managerial workers. In all occupations at least 10% of full-time employees work 50 hours or more per week. With regard to Western Australia, it is likely the proportion of intermediate production and transport workers working extended hours is greater than the national average since many of these workers are employed in the mining industry where average weekly hours are high (see Table 1).

46. Table 4 shows that professional, associate professional and managerial workers account for more than half of all employees who work 60 or more hours per week. Intermediate production and transport workers account for a further 13.2% of employees who work 60 or more hours per week.

Table 4: Working Arrangements full-time employees (excluding owner managers) – Proportion of total employees, Australia, 2000

	40 hours or more %	50 hours or more %	60 hours or more %
Managers and administrators	7.2	12.3	13.9
Professionals	22.1	25.3	23.2
Associate professionals	13.0	17.4	19.7
Tradespersons and related workers	15.7	11.8	10.5
Advanced clerical and service workers	3.4	1.9	1.6
Intermediate clerical, sales and service workers	15.5	10.7	9.6
Intermediate production and transport workers	9.9	11.8	13.2
Elementary clerical, sales and service workers	5.6	3.3	2.8
Labourers and related workers	7.5	5.5	5.5
TOTAL	100	100	100

Source: ABS Labour Force Survey November 2000 (Cat No 6342.0)

47. National data on hours worked by all employees including part-time employees across industries also show considerable diversity as shown in Table 5. While nationally 19% of all employed persons worked 49 hours or more per week, the proportion was much higher in industries such as Agriculture (41%) and Mining (40%). Table 5 also indicates that the proportion of employees working 49 hours or more per week is comparatively high in the transport (30%) and construction sectors (27%).
48. Working long hours is common amongst the self-employed, where over half (57%) of the self-employed worked 50 hours or more per week and 14% worked 70 hours or more per week, compared with 23% and 3% respectively of employees⁸.
49. Table 5 shows that in all occupational groups women working full-time were less likely than their male counterparts to work 49 hours or more per week. This may be attributed to the high proportion of women who work part-time and their child bearing and rearing responsibilities.

⁸ ABS (2003), *Australian Social Trends*, p119

Trends in Working Hours

Table 5: Hours Worked, Employed Persons, Occupation and Industry, Australia, February 2003⁹

OCCUPATION	Average Weekly Hours Worked			Employees Working More Than 49 hours per Week		
	Males	Females	Persons	Males	Females	Persons
				%	%	%
Managers & administrators	48.5	38.9	46.1	52	30	46
Professionals	41.3	32.8	37.0	29	13	21
Associate professionals	45.1	36.2	41.3	39	20	31
Tradespersons	40.6	31.6	39.6	24	13	23
Advanced clerical & service workers	36.6	26.4	27.6	20	5	7
Intermediate clerical, sales and service workers	36.2	28.2	30.5	17	5	8
Intermediate production and transport workers	40.0	28.1	38.5	27	5	24
Elementary clerical, sales and service workers	29.0	21.8	24.4	10	3	5
Labourers	32.8	23.6	29.4	15	4	11
TOTAL	40.0	29.2	35.2	27	9	19
INDUSTRY						
Agriculture, forestry & fishing	47.0	30.5	42.0	49	22	41
Mining	45.9	32.6	44.7	43	11	40
Manufacturing	41.5	33.6	39.3	24	9	20
Electricity, gas and water supply	36.5	35.0	36.2	15	7	14
Construction	41.1	23.9	38.7	30	7	27
Wholesale trade	42.1	31.0	38.6	29	8	22
Retail trade	35.7	25.1	30.2	23	7	15
Accommodation, cafes & restaurants	37.8	27.3	31.7	27	12	18
Transport & storage	42.4	31.8	39.9	36	10	30
Communications	39.2	32.5	37.0	24	11	20
Finance & insurance	41.4	31.8	36.0	28	6	16
Property & business services	40.6	30.7	36.2	31	10	22
Government administration	36.5	31.6	34.2	13	6	10
Education	38.6	32.7	34.6	25	15	18
Health & community services	37.1	27.7	29.7	21	5	9
Cultural & recreational services	36.9	27.2	32.0	26	11	19
Personal & other services	37.4	28.9	33.4	22	10	16
TOTAL	40.0	29.2	35.2	27	9	19

Source: ABS Labour Force Survey February 2003

⁹ ABS Labour Force Survey February 2003 (provided in Chamber of Commerce and Industry submission)

Why Are People Working Long Hours?

50. Data on working time preferences based on the *Survey of Employment Arrangements and Superannuation* indicate high levels of worker satisfaction with current working hours arrangements across all industries. National findings of this survey with regard to working hours show that almost two thirds (65%) of employees were satisfied with their current hours. About a quarter (22%) said they would prefer to work more hours (for more pay) while 13% said they would prefer to work fewer hours (7% would accept less pay while 6% felt they should receive the same pay)¹⁰.
51. Table 6 provides statistical information in relation to Western Australia, which shows that over three-quarters (83%) of full time employees indicated that their preferred working hours arrangement was either “same hours and same pay” or “more hours and earn more”¹¹.

Table 6: Employees Usual and Preferred Hours of Work, Western Australia, 2000¹²

Usual weekly hours	Preferred Working Arrangements			
	Less hours and earn less	More hours and earn more	Same hours and earn same	Less hours and earn the same
	%	%	%	%
35-39	7.1	18.7	69.4	4.8
40	8.0	21.2	65.3	5.5
41-50	11.5	15.6	63.3	9.6
51-60	9.7	12.1	69.8	8.4
61 or more	9.5	4.4	73.4	12.7
Total	9.2	16.7	66.7	7.4

Source: ABS Survey of Employment Arrangements and Superannuation 2000 (unpublished)

52. Table 6 also shows that nearly three quarters of full-time Western Australian employees working 61 hours or more were satisfied with their current hours and payment arrangements, and an additional proportion of employees (4.4%) indicated a preference for working more hours in return for more pay.
53. Working time arrangements and preferences were raised in some submissions. It was stated in both written and oral submissions that workers on low hourly rates of pay rely on overtime as a means of supplementing their weekly wage. Extended working hours that resulted in paid overtime was an “integral part of the weekly wage”¹³. It was posited that the preparedness of employees to work extended hours reflects their aspirations to obtain or maintain higher incomes¹⁴.

¹⁰ ABS Survey of Employment Arrangements and Superannuation 2000

¹¹ *ibid.*

¹² Preference of employees in their main job.

¹³ For example, public submissions by LHMU, WA Branch. Karratha Hearing, 31 October 2003 and Perth Hearing, 12 November 2003, UnionsWA, Women’s Policy Office, Department of Community Development

¹⁴ For example, public submissions by: Mineral Drilling Association of Australia; John Bowler, MLA; Injury Council of WA

Trends in Working Hours

54. In other submissions, it was claimed that extended working hours is an intrinsic component of particular occupations. The WA Police Union of Workers' observation that "...officers are bound by a shared commitment to 'get the job done'"¹⁵, was re-iterated in oral submissions where it was stated that "trauma work and almost all emergencies means that it is not possible to leave work when the shift is over – you leave when the work is done"¹⁶. Other circumstances that necessitate employees working through week-ends and long hours include urgent criminal, maritime and corporate matters, particularly those that involve court appearances¹⁷ and work in the non-government sector¹⁸.
55. Qualitative studies have also explored employee attitudes and views of extended working hours. In the *Fifty Families* study, inter-related explanations provided about why people worked unreasonable hours included the desire for "doing a decent job", commitment, under-staffing, risk of redundancy and desire for promotion, as well as reliance on overtime payments¹⁹. In appraising the observations and examples given by respondents, Pocock argues that workers have little choice regarding working long hours. Given the mechanics of workplace power relations, workers are expected to work additional hours²⁰.
56. Through a combination of case studies and closed questionnaires of workers (963) and their partners (489), the Griffith Work Time Project researchers found that "extended hours were associated with particular forms of workplace cultures perceived by employees"²¹. Similarly, Kodz et al. in their review of extended working hours found that "a culture of working long hours and the influence of attitudes and behaviours within organisations have been identified in the literature as a further contributory factor to long working hours"²².
57. The Workplace Employee Relations Survey undertaken in the United Kingdom of a representative sample of workplaces with over 10 employees queried survey respondents about their reasons for working long hours. Analysis of the data indicates that where overtime is rewarded, the main reason for working long hours is the additional pay. However, where overtime is not rewarded, the requirements of the job are a key reason, but pay is not as important. At the same time for employees who work unpaid overtime, workload or the volume of work was seen to be a key driver of long working hours²³.

¹⁵ Public submissions: WA Police Union of Workers; and Injury Control Council of WA.

¹⁶ Perth Hearing, 12 November 2003.

¹⁷ Perth Hearing, 12 November 2003.

¹⁸ For example, public submission: Injury Control Council of WA.

¹⁹ Pocock et al. (2001) pp20-23.

²⁰ Ibid.

²¹ Griffith Work Time Project. (2003) p.19

²² Kodz, J. et al. (2003) p. 66

²³ Cully et al. (1998)

Discussion

58. The Review Panel notes that there are many ways of defining working hours and that data collected by the ABS may not take account of all relevant factors when determining average hours worked. For example, daily, weekly or annual hours, hours in main job and other jobs, commuting time and business travel time could all be considered when calculating the time worked. Determining whether these factors affect the length of working hours, coupled with workers' perceptions of hours worked makes it difficult to accurately define and measure working hours. The prevalence of casual and part-time work has also led to an increasing proportion of workers holding more than one job. It was noted in submissions that a growing proportion of low-paid or part-time workers in sectors such as hospitality, cleaning and retail may have more than two jobs to earn a living. Thus, while relatively few hours may be worked in each job or the main job, the total number of hours may be longer. These issues are pertinent to determining and defining extended working hours and are described in Attachment II.
59. The ambiguities concerning the definition of working time are rendered more problematic by the range of working time arrangements, which make it difficult to establish the actual hours worked by employees across industries and occupations, including the extent to which extended hours are worked.
60. The Review Panel also notes that overtime has been a long established way of extending operating time and working hours to meet workplace requirements on a needs basis. It has been suggested that the persistent use of overtime has contributed to a "long hours culture" wherein long hours are the norm, rather than the exception. One of the unintended consequences of this is that it is apparent workers, particularly those on low rates of pay, are reliant upon this additional income.
61. Analysis of empirical studies suggest that individuals working long hours are likely to do so for a combination of reasons, and that it is difficult to isolate the key or underlying influences and reasons, and that these may change over time.
62. Overseas comparisons with Australia of working time arrangements are difficult to measure. However, conventional measures of average annual hours indicate that full time working hours in Australia are now broadly comparable with the USA, and behind only South Korea as the highest compared with other OECD countries. It has been suggested that unlike most OECD countries, Australia, the USA, the United Kingdom and New Zealand are experiencing a growing trend towards longer full time working hours.²⁴

²⁴ Campbell (2001). See also International Labour Office (2003)

Trends in Working Hours

63. Quantitative and qualitative Australian data confirm that the average number of hours worked in Western Australia have increased over the past decade, as has the pattern of overtime. Extended hours are prevalent in professional and managerial occupations, followed by intermediate production and transport workers. Analysis of working hours by industry indicates that average weekly hours have increased in the mining, agriculture, accommodation and transport sectors.
64. While occasional peaks in working hours to meet a specific deadline or to meet the requirements of seasonal work in agriculture or fishing is not generally perceived as a problem, the Review Panel is conscious that continuously working extended hours may have adverse implications.

Chapter 3 - Findings of the Effects of Extended Working Hours

Introduction

65. Alterations to the duration and span of working hours from the so called “standard working week of 9.00 am to 5.00pm” have occurred in the context of inter-linked socio-economic and demographic trends.
66. Factors and trends that have contributed to the emergence of a variety of working time arrangements²⁵ and altered the profile and nature of labour force participation include the following:
- The increasing participation of women in the labour market, the ageing of the Australian population, and growing rates of part-time employment and casual employment.
 - Links between globalisation, competitive economic environments, and productivity.
 - Access and use of outsourcing, call-centres, and telework.
 - The effects of competitive and regulatory trends both within Australia and the global market on the categorisation of work and rates of remuneration.
 - The replacement of a pay system comprising a base rate and allowance with penalties for overtime with a remuneration system that relies on annualised salaries²⁶.
 - The exponential expansion in information and communication technologies, as well as the computerisation of a vast range of plant and machinery.
 - The breaking or blurring of boundaries between “work” and “home” through email, mobile telephones and home offices.
 - The aspirations of Australians to attain and enjoy a high standard of living.
67. These and other factors have revised the meaning and place of “work” over the past fifty or so years²⁷. and remains without doubt subject to further revisions and re-configurations.

²⁵ VandenHeuval and Wooden, (2000); Pocock et al. (2001); Callus and Lansbury (2002)

²⁶ Watson et al. (2003) pp.112 - 113

²⁷ See for example, Quinlan (1988); Wooden August (2000); Watson et al. (2003); Griffith Work Time Project (2003), and Buxton and Hartley (2002)

Findings

68. Within this context expectations and demands for services that operate 24 hours per day, seven days per week have increased and been fuelled by two considerations. Consumer demand and expectation is that not only will emergency, police and medical services be available at any time, but increasingly that retail services such as supermarkets and petrol stations also be available 24-hours a day. The second consideration relates to workplaces with complex mechanical components that render consistent start-up/shut-down times unproductive.
69. Changes in the span, duration and distribution of hours worked have since become the subject of scrutiny from diverse perspectives. Some argue that these new and evolving working arrangements may have a deleterious effect on family and social relationships²⁸, and a recurrent theme in submissions concerned the adverse effects of long working hours on the health of individuals, their families and the community²⁹.
70. Others have explored the effects of long working hours on employees claiming, that consistently working extended hours is neither productive nor beneficial to good health³⁰. Such research has focussed on specific industries such as manufacturing, transport and mining, as well as occupations such as medical practitioners in hospital contexts. It has generated a substantial body of literature concerning “fatigue” in the broader occupational safety, health and labour contexts. It has also been suggested that these organisational and technological changes and workplace arrangements pose particular problems for occupational safety and health regulators³¹.
71. The Review Panel notes that workers are not homogeneous and share a range of characteristics. For example, parents with family responsibilities may find extended working hours more difficult to manage due to their child care arrangements than workers/employees who do not have young children or other dependents. Some workplaces may have a high proportion of employees whose familiarity with employee rights and proficiency in English is limited. Other workplaces, particularly some in regional centres may use programs to enhance the employment of Indigenous workers. In these and other circumstances, the effects of extended working hours vary upon employees, their families and communities.
72. Under its terms of reference the Review Panel was required to have regard to the “extent and nature of demonstrated health and safety issues...for employees working extended hours” and “emerging issues...impacting on the health of individual workers, their families or their community”.

²⁸ See for example Millward (2002); Pocock et al. (2001)

²⁹ For example, submissions: Commissioner for Public Sector Standards; Office of Women’s Policy, Department of Community Development; and the Women’s Economic Analysis Policy Unit, Curtin University.

³⁰ Folkard (2003) is a comprehensive review of literature on the effects of shiftwork on workers; Haertsch and Weeks (2003) examines all medical and non-medical studies that examine the effects of long working hours, safety and fatigue in Australia and overseas

³¹ Quinlan (2003). p.2.

73. This chapter explores the multiple cumulative effects of extended working hours. It considers the effects of extended working hours on workers, their families and the community with reference to written and oral submissions as well as the findings of major quantitative and qualitative literature on working time patterns. It utilises empirical studies, guidelines and reports on the nature and implications of extended working hours, and the findings of secondary analysis of established social surveys.
74. Methodological limitations and general qualifications apply to these empirical studies. Attachment II outlines some of these caveats and, in making these qualifying comments and observations, the intent is not to be overly critical but rather to suggest that these studies are based on a broad range of assumptions, originate from various perspectives and test differing hypotheses.
75. This chapter is primarily an updated overview of empirical studies on adverse effects of long working hours. As such it largely reinforces the findings of recent reviews and research.

Effects of Extended Working Hours on Workplaces

76. This section summarises the main findings relating to the diverse and varied effects of working long hours in workplaces. Both Australian and overseas research has focussed on how extended working hours affects an individual's health, well-being and performance. Some researchers have concentrated on specific health outcomes that have been associated with long working hours, particularly shiftwork³², while others have examined the impact of extended working hours upon individual and workplace safety in terms of the increased likelihood of workplace accidents. The association between productivity, performance and extended working hours has also been the subject of research and more recent studies have begun to assess working conditions, including long working hours and links to occupational stress and psychological well-being.

Health, fatigue and extended hours

77. Workplace fatigue and stress were identified in several submissions as some of the consequences of extended working hours. Repetitive movements, standing for long periods, frequent manual handling and monotony that may be requirements of particular jobs, accompanied by long working hours were also seen as contributing to fatigue³³. It was noted that the impact of "extra, often unpaid, work was...increasing stress and reducing recovery time..."³⁴. A random sample of people surveyed by the Fremantle Community Legal and Advocacy Centre indicated that fatigue and stress were risks that occurred as a result of working extended hours³⁵.

³² See for example Buxton and Hartley (2002); Folkard (2003)

³³ For example, submissions: the Finance Sector Union of Australia; State School Teachers' Union; Shop Distributive and Allied Employee's Association; and the CPSU/CSA.

³⁴ Submission: UnionsWA.

³⁵ Submission: Fremantle Legal Advocacy Centre.

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78. A substantial component of the available literature has considered whether and when working extended hours will make an individual tired or fatigued. Fatigue has been measured largely indirectly by examining health effects thought to be associated with fatigue and through measures such as rates of accidents.
79. Even a cursory examination of the literature indicates that there is no standard definition of fatigue itself. Kant et al. note that the definition and assessment of fatigue has been the subject of controversy with discussion surrounding whether fatigue is a discrete entity (chronic fatigue syndrome), a set of symptoms of unknown origin or a specific form of psychological disturbance³⁶. White and Beswick in their recent appraisal of the studies examining long hours (specifically excluding shiftwork) note “fatigue” has been conceptualised as a syndrome, where symptoms can be manifest on a continuum with differing levels of tiredness and alertness.
80. Within this paradigm there are different types of fatigue including sensory, cognitive, intellectual and physiological³⁷. Fatigue does not leave clear biological traces in the way that levels of alcohol can be determined. However, some researchers have suggested that like alcohol, fatigue may have the insidious effect of reducing the individual’s capacity for self-evaluation³⁸.
81. Regardless of how fatigue is defined and its symptoms and manifestations identified and measured, there is agreement that fatigue has negative impacts on:
- performance, including speed with which procedures are undertaken;
 - alertness, leading to drowsiness, confusion and decreased vigilance to identify problems; and
 - mood, likely to interfere with effective communication³⁹.
82. It is also generally acknowledged that fatigue is not an issue that can be necessarily addressed solely by the individual, but is a matter of concern in the public domain. As the Neville Committee noted in its investigation of fatigue in the transport industry:

“Fatigue is not just an industrial issue to be negotiated between employers and employees. It is also an occupational health and safety issue, a commercial issue, a public safety issue and, at times, an environmental issue. Individuals and organisations that fail to manage human fatigue sensibly, risk having or creating accidents with a broad range of damaging and enduring consequences”⁴⁰.

³⁶ Kant et al. (2003):i32-i39

³⁷ White and Beswick,(2003) p.16 –18.

³⁸ Dalziel and Job (1997). See also Brown (1994); National Aeronautics and Space Administration (1995); Williamson et al. (1996)

³⁹ National Road Transport Commission (2001) p. 21.

⁴⁰ Standing Committee on Transport, Communications and the Arts (2000)

83. Studies that have sought to ascertain whether there is a correlation between extended hours worked during the daytime and fatigue have tended to conclude that there is a link, however casual, between the two variables. White and Beswick in their comprehensive review of literature concerning working long hours during the day, concluded that:

“...literature suggests that there is an association between working long hours and fatigue. Evidence from the literature on accidents and performance also suggests that long hours are related to fatigue”⁴¹.

84. White and Beswick also noted that “whilst researchers have associated working long hours with various effects, the relationships are complex and are mediated by the following factors:

- individual factors (gender, age, personality);
- choice and control over work hours and rest breaks;
- type of job/occupation/task; and
- type of work environment or culture”⁴².

85. Similarly, fatigue has emerged as a major concern in the literature across industries and occupations with shiftwork, or any type of working time arrangement that involves working during the night regularly and/or periodically. The Australian Resource Centre for Hospital Innovations (ARCHI) concluded in its recent comprehensive review of literature on safe staffing and patient safety “fatigue is a major concern for health professionals working long hours or rotating shifts. Sleep deprivation has an effect, however quantified, on clinical performance and deterioration in mood”⁴³.

86. In reviewing the literature on the detrimental effects of shiftwork, most researchers have concluded that the “research evidence indicates that the experience adversely affects sleep and promotes fatigue”⁴⁴. Findings of empirical studies indicate that shift workers have an increased risk of:

- cardiovascular disease⁴⁵;
- gastrointestinal disease;
- anxiety, depression and increased neuroticism;
- reduction in quality and quantity of sleep;
- fatigue; and
- spontaneous abortion, low birth weight and prematurity⁴⁶.

87. These conclusions are substantiated by the findings of several studies.

⁴¹ White and Beswick (2003) p4.

⁴² *ibid.* p4-5.

⁴³ Haertsch and Weeks, (2003)

⁴⁴ Folkard (2003) p6.

⁴⁵ See Folkard (2003); Jansen et al. (2003); Boggild and Knutsson (1999); Baker, Heiler and Ferguson (2003)

⁴⁶ See Jansen et al. (2003); Folkard (1990); Baker, Heiler and Ferguson (2003); Harrington (2001)

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88. Heiler's recent comprehensive study of shiftwork in the Tasmanian mining industry examined the impact of extended hours on the health and safety of employees and on family life. The study confirmed that extended shifts and poorly designed rosters result in fatigue, sleep disturbance and impaired physical and cognitive performance. Some rosters – particularly 12-hour shifts on an uneven 56-hour roster – did not provide sufficient recovery time to work off 'sleep debt'. As a consequence, workers were exposed to serious immediate risks at work, including fatigue-related errors when operating plant (52.5% of mine workers on night shift reported 'always' or 'frequently' nodding off while at work). Furthermore, sleep deprivation and increased exposure to hazards were associated with latent, longer-term risks to health.⁴⁷
89. Arnold et al. in their study of Australian truck drivers and their working hours and levels of tiredness⁴⁸ found that about a fifth (20%) had fewer than 6 hours of sleep in the previous 24 hours. A further 12% reported less than 4 hours sleep. Over two thirds of managers (70%) believed that long working hours was a major cause of fatigue and about 40% of drivers agreed with this assessment.
90. A representative survey of 300 long distance truck drivers commissioned by the Inquiry into Safety in the Australian Long Haul Trucking Industry undertaken for the Motor Accidents Authority in New South Wales found that 14% had experienced a crash in the past 12 months, with almost a quarter reporting a crash in the past five years⁴⁹. The Inquiry found that fatigue accounted for a significant proportion of single vehicle incidents.
91. A cross-sectional study of forestry workers concluded that the most significant predictors of workplace injury or near-miss injury events was fatigue due to long working hours⁵⁰.
92. Examples of fatigue in medical contexts include a plastic-surgery resident who had been working for more than 50 hours without sleep and briefly nodded off with the instrument in hand during a colon operation⁵¹. Doctors who worked more than 48 hours per week were 5 times more likely to have car accidents, particularly when travelling home⁵².
93. In another study, specific associations between health and extended hours were found among women. Health problems related to the digestive system, blood pressure, arms, legs, hands, breathing, anxiety and depression⁵³.

⁴⁷ Heiler (2002)

⁴⁸ Arnold et al. (1997)

⁴⁹ Quinlan (2001)

⁵⁰ Cited in Haertsch and Weeks (2003) p58

⁵¹ Boodman (2001) cited in Haertsch and Weeks (2003)

⁵² Kirkcaldy, Trimpop. and Cooper, (1997)

⁵³ Kodz et al. (2003) p.194.

94. The adverse effects of shiftwork on individual health and well being surfaced as a recurrent theme in submissions from individuals and organisations. For example, it was stated that the health of the worker, the immediate family members and the community is greatly affected by 12-hour shifts⁵⁴. Several workers in oral and written submissions claimed that they were consistently tired and fatigued⁵⁵. Case studies of fatigue were also provided⁵⁶.
95. Some submissions stated that these effects were addressed by specific initiatives such as lifestyle programs that focus on overall well being, exercise regimes, dietary advice and resource materials on managing shiftwork⁵⁷. Fatigue management plans had also been implemented in workplaces characterised by shiftwork and include practices that enable employees who may be fatigued to have a rest break without penalty⁵⁸.

Work intensification and extended hours

96. Work intensification as a concept describes how the pace of work and the tasks to be completed have increased over the past decade. Some researchers have drawn a distinction between “extensive hours” (long hours) and “intensive work” (working harder, faster or more efficiently)⁵⁹.
97. Case studies describing work intensification as a factor that contributes to long working hours were provided in submissions. For example, it was noted that employees in a wide range of occupations from hospitality, cleaning, child care, retail and finance felt pressured to do more tasks in the same or fewer hours resulting in a pattern of unpaid overtime⁶⁰. UnionsWA noted that work intensity is about the pressure to “work harder and faster” until the job is done.
98. The key elements of work intensification were identified in a recent study of nursing staff in the New South Wales hospital system. The study found that nurses were subjected to very intense physical and mental demands as a result of changes in hospital management systems. Demands were associated with fewer staff; increased workloads; an escalation in the skills and responsibilities associated with new technologies; and the need to make critical decisions under pressure⁶¹.

⁵⁴ For example, submission: Pilbara Division of General Practice and Kalgoorlie Hearing, 16 September 2003.

⁵⁵ Karratha Hearing, 31 October 2003.

⁵⁶ For example, submissions: LHMU WA Branch; UnionsWA; Finance Sector Union of Australia; and individual submissions. Kalgoorlie Hearing, 16 September 2003; Karratha Hearing, 31 October 2003 and Perth Hearing, 12 November 2003.

⁵⁷ For example, submissions: Chamber of Minerals and Energy; WMC; Sons of Gwalia; Premier Coal, Bunbury Hearing, 10 November 2003.

⁵⁸ For example, submissions: Chamber of Minerals and Energy; and WMC.

⁵⁹ Bell and Hart (1998); Hogarth et al. (2003)

⁶⁰ For example, submissions: UnionsWA; SSTU; LHMU; AWU; Finance Sector Union of Australia; and Shop Distributive and Allied Employee’s Association.

⁶¹ Buchanan, and Considine (2002) pp.ii.

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99. While work intensification has been linked to organisational restructuring, redundancies and downsizing⁶², it has also been suggested some of the initiatives that led to work intensification such as job enrichment and enlargement have also made working life more interesting⁶³.

Productivity and extended hours

100. Although few submissions specifically addressed the association between extended working hours and productivity, research was cited that indicates productivity decreases with extended hours⁶⁴.
101. A comprehensive review of the impact on job performance of sleep deprivation associated with long working hours found that fatigue had deleterious effects in respect of the following issues:
- the ability to comprehend complex situations without distraction;
 - monitoring events and improving strategies;
 - risk assessment and accurate prediction of consequences;
 - thinking laterally and being innovative;
 - personal interest in the outcome;
 - controlling mood and behaviour;
 - monitoring personal performance;
 - recollection of timing of events; and
 - effective communication⁶⁵.
102. Recent research suggests that fatigue related errors are common well before the point at which an individual can no longer maintain wakefulness⁶⁶ and that performance may actually be the outcome effect of working long hours with fatigue as the linking mechanism⁶⁷. At the same time, mediating factors have also been identified. For example, it has been suggested that mechanisms such as the length of the working week may influence productivity through effects on individual motivation, effort, satisfaction and physical well being. Beswick and White concluded that there are limitations to most methods of performance research and many factors may mediate the relationship, including the observation that deterioration in performance due to long hours is often accompanied or dependent upon sleep disruption⁶⁸.

⁶² Pocock et al. (2001) p112; Griffith Work Time Project (2003)

⁶³ Watson et. al (2003) p94-98.

⁶⁴ For example submissions: Unions WA; Finance Sector Union of Australia; Office of Multicultural Interests

⁶⁵ Harrison and Horne (2000) cited in Dawson, McCulloch and Baker (2001) p. 16; See also Haertsch and Weeks (2003)

⁶⁶ Dawson, McCulloch and Baker (2001)

⁶⁷ White and Beswick (2003) p34

⁶⁸ Kodz et al. (2003) p111 White and Beswick (2003) p35

103. Other research has focused on how increased working hours are partly a response or consequence of the pressure, particularly in the globalised economic environment, to increase productivity. The pressure to be more competitive and productive is perceived to be the impetus for the excessive use of paid and unpaid overtime⁶⁹.
104. The relationship between long working hours and performance including productivity appears to be quite complex, with many possible mechanisms and mediators.

Extended working hours and safety

105. Issues of safety and extended hours were raised in some oral and written submissions⁷⁰.
106. Research suggests that working long hours may have an impact on individual safety in terms of increased likelihood of work-related accidents. For example, Dawson et al claim there is a “simple relationship between extended hours of work and safety. That is, extended hours of work lead to reduced amounts of sleep. The reduction in sleep has been associated with increased levels of fatigue and reduced alertness”⁷¹. In a study of taxi drivers in Australia, the researchers found that fatigue may lead to greater accident involvement due to the inability of the fatigued individual to realistically assess their performance⁷².
107. Other studies have identified mediating factors and it is thought that fatigue, as a result of long working hours, may affect behaviours such as maintenance of attention and risk taking. Reviews of the effects of long working hours have concluded that while research findings are not entirely consistent “there clearly appears to be a reason for concern about the relationship between long working hours and safety and accidents, particularly for certain occupations”⁷³.

Other workplace implications

108. An emerging area of research relating to extended working hours concerns psychological well being. Stress is an issue that is linked with extended working hours and is viewed as a factor affecting reduced health and well being. Although stress may result from a variety of factors, some work-related and some not, when it manifests itself as a health and safety issue in the workplace it generally has to be addressed.

⁶⁹ See, for example, Kodz et al. (2003) and Heiler (1988)

⁷⁰ For example submission: UnionsWA; and Australian Workers Union Karratha 31 October 2003.

⁷¹ Extended Working Hours in Australia: Counting the Costs. Commissioned by the Queensland Department of Industrial Relations. – Drew Dawson, Kirsty McCulloch and Angela Baker (2001).

⁷² Dalziel and Job (1997)

⁷³ Ibid p31

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109. Some studies have suggested that extended working hours when accompanied by other factors such as “lack of personal control at work, levels of supervision, work load” can contribute to stress-related problems⁷⁴. Results of the Medical Careers Survey of over 4000 doctors in vocational training conducted by the Australian Medical Workforce Advisory Committee are pertinent. Analysis of stress scores and rates of satisfaction with issues such as hours worked, choice of discipline, education and training programs indicate a positive association with average hours worked and stress scores, with stress scores increasing as the number of hours worked increased⁷⁵. Research, particularly in the United Kingdom has also begun to focus on the association between depression and long hours, although Kodz et al. note, “it is important to consider the issue of causality ... it does not mean that long hours are the cause of depression”.
110. Noise as an environmental factor and its effects on shift workers is also emerging as a topical issue. It has been posited that physical and psychological effects from chronic and low-level noise begin with less than 4 hours of exposure⁷⁶.
111. It was also noted that to date a comprehensive cost-benefit analysis of the extended working hours, productivity and adverse employee health outcomes has yet to be undertaken⁷⁷.

Consequences of Extended Working Hours on Families

112. It is generally acknowledged that the spheres of home and work are connected and interdependent. This section considers two separate but inter-related issues relating to extended working hours - first, the effects of extended working hours on family and social relationships as well as the wider community; and secondly, how extended working hours affects workers who have family responsibilities. As Glezer and Wolcott observed:

“at the heart of work-family/work-life issues is a paradox: the essential competition between the business imperative to be productive and efficient in the market place and the need of workers to enjoy satisfying family and personal lives”⁷⁸.

⁷⁴ Kodz et al. (2003) p.200

⁷⁵ Australian Medical Workforce Advisory Committee (AMWAC) (2003) p15

⁷⁶ Kerin (2003)

⁷⁷ For example public submission: Workplace Standards Tasmania.

⁷⁸ Glezer and Walcott (1999)

Impacts of extended working hours on family and social relations

113. Case studies of the adverse effects of extended hours on marital and family relations and community well-being were presented in both oral and written submissions. Absence from celebratory events was a consistent refrain: “I missed our anniversary, the school assembly, my child’s birthday, the cricket match”. Other submissions undertook surveys that found that extended working hours affected their family and social relations⁷⁹.
114. Several quantitative and qualitative studies have been conducted in Australia to ascertain work and family interactions. These describe how extended hours, including shift work, affect the relationships between the employee, usually the father, and his children.
115. Glezer and Wolcott in their analysis of the results of the Australian Family Life Course Study found that almost half of all men and women who worked 41 hours or more indicated “their work interfered with home life”⁸⁰. A telephone survey of a random sample of 1000 fathers found that a significant number of fathers believed that the major barrier to being an effective parent was commitment to paid work⁸¹.
116. Recent surveys of Australian workplaces confirm the importance of work/life balance both to employers and employees. In the 2003 *JobFutures/Saulwick Employee Sentiment Survey* over half the survey respondents (58%) stated that their job always or sometimes unreasonably interfered with the time devoted to family and friends. Over a third (44%) stated that their job resulted in their being “sometimes” too tired to go out with friends and made them irritable with family or friends (44%)⁸². In the *L.E.A.D Survey* over a third of respondents (36%) indicated that they did not have the right work/life balance⁸³.
117. These findings are similar to those of the Griffith Work Time Project⁸⁴ where those respondents with high scores on the pressure index agreed with the proposition that work responsibilities interfered with social life (60%) and were less satisfied with their work/life balance (45%).
118. Similarly, about half the doctors (42.8%) surveyed by Australian Medical Work Advisory Council were either very dissatisfied or dissatisfied with “time for family, social and recreational activities”⁸⁵. About a third of doctors (29.1%) stated that they intended to work part-time, and of these, half (51.9%) were women⁸⁶.

⁷⁹ For example, public submission: CPSU/CSA.

⁸⁰ Glezer and Wolcott (1999) p70-71

⁸¹ Russell et al. (1999)

⁸² Saulwick (2003) p15

⁸³ Leadership Management Australia (2003) p107

⁸⁴ Griffith Work Time Project. (2003) p19

⁸⁵ Australian Medical Workforce Advisory Council (2003) p15.

⁸⁶ Ibid. p13.

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119. More recent studies have also explored the specific experiences of long working hours and its effects upon children. In these studies partners described how the long/unreasonable hours worked by employees resulted in their “having remote relationships with their sons and daughters” and as having “visiting rights”⁸⁷. Other studies show that fathers are aware their working hours had repercussions for their children⁸⁸, confirming that even when workers were at home, their “moodiness”⁸⁹ and sense of “feeling stressed and pressured”⁹⁰ cast a pall on family life.
120. A recent study of children whose fathers worked an average of 47 hours per week, with a quarter working over 50 hours per week found that many children identified their father’s role in relation to paid employment and recognised its economic contribution, but regretted how it reduced their contact time⁹¹.
121. Income may be a mediating factor that affects levels of satisfaction with working hours. Researchers at the Australian Institute of Family Studies found that “contrary to expectations extended work hours did not appear to have a direct adverse effect on relationship well-being”⁹².
122. A recurrent theme in oral and written submissions concerned the effects of shift work and fly-in/fly-out operations on families and communities when parents, in most instances fathers, worked long hours. Night shifts - graveyard shifts, back-to-back shifts and 12-hour shifts were perceived to be factors that impact “the greatest on a person’s social and family interaction which imposes an unwanted burden on family life, particularly on the early developmental phases of young children”⁹³. Declining rates of participation in social and sporting activities in rural and regional communities were perceived to be a consequence of 12-hour shifts and fly-in/fly-out work practices⁹⁴.
123. The strain placed by shift work on marital relations was also raised. A submission by the partner of a shiftwork employee described the effects of shift work as “a silent epidemic of serious marital and health problems”⁹⁵ and “intimacy for me has become a duty not a pleasure”⁹⁶. Others described the tensions of living in a household where “children were told off for making noise because dad’s asleep or tired or grumpy”⁹⁷.

⁸⁷ Pocock et al. (2001) p35-36.

⁸⁸ See Hand and Lewis (2002)

⁸⁹ Pocock et al. (2001) p72

⁹⁰ Glezer and Wolcott (1999) p72

⁹¹ Russell et al. (1999)

⁹² Weston, Qu and Soriano (2002) p.23.

⁹³ For example, submission: UnionsWA

⁹⁴ For example, submissions: the Shire of Mount Magnet; Mid West Development Commission; and the Australian Workers Union. Kalgoorlie Hearing, 15 & 16 September 2003.

⁹⁵ For example, submission: Individual 11. Karratha Hearing, 31 October 2003.

⁹⁶ For example, submission: Individual 13. Karratha Hearing, 31 October 2003.

⁹⁷ For example, submission: Individual 11. Karratha Hearing, 31 October 2003.

124. These experiences are substantiated by the findings of empirical studies. Buxton and Hartley in their comprehensive critical appraisal of studies of the effects of shift work on workers' families found that shift work affected the relationships of fathers to their children, albeit the impact differed between sons and daughters⁹⁸. In addition, another recent study found that the children of shift working men experienced higher levels of anxiety, although this may be attributed to the high levels of anxiety experienced by the mother⁹⁹.
125. Employers, particularly those from the mining sector, acknowledged these effects on family and community life and outlined a range of initiatives that had been implemented to address potential work/life balance issues arising from working hours. For example, the Chamber of Minerals and Energy observed, "an individual's productivity in the workplace depends as much on a strong family and social situation as it does on a supportive work environment"¹⁰⁰. Specific initiatives introduced by the mining sector to address work/life balance include the provision of total family counselling services and formal programs on healthy lifestyles, including sessions with employees' partners¹⁰¹.

Extended working hours and workers with family responsibilities

126. Since *ILO Convention 156 – Workers with Family Responsibilities* was ratified by Australia in 1991, the subsequent amendments to anti-discrimination laws at State and Commonwealth levels to include family responsibility as a ground of unlawful discrimination and inclusion of such provisions in industrial agreements, there has been growing awareness of the economic impetus for recognising that workers, both male and female, have responsibilities outside the workplace that may affect productivity.
127. Demographic trends indicate that the labour market participation of women, including those rearing children, is increasing. While the pattern of participation by women with dependent children continues to differ from that of men, this coupled with other trends such as the changing structure of families and the ageing population has placed renewed emphasis on ensuring that workplaces are "family-friendly"¹⁰².
128. The realities that shape the experiences of workers who have family responsibilities in the workplace are generally acknowledged. The "balance between work and personal life" was nominated by employer and business leaders as one of the top five sources of pressure faced by employees¹⁰³. While recognizing that a complex set of variables interact to generate and maintain productive workplaces, it is worth noting that a third of business leaders (34%) identified "flexible working hours" as one of the top five influences on the performance of their employees.

⁹⁸ Buxton and Hartley (2002) p98-100.

⁹⁹ Pati A. K. & Chandrawanshi, A. (2001) pp 45 –59.

¹⁰⁰ For example, submission: Chamber of Minerals and Energy.

¹⁰¹ Kalgoorlie Hearing 16 September 2003 and Karratha Hearing, 31 October 2003.

¹⁰² Gray and Turnbull (2002); Gray and Stanton (2002)

¹⁰³ LEAD p86-89.

Findings

129. A recent RMIT study conducted for the Victorian Government concluded that work/family balance is important because there is a growing level of dissent among workers who are finding it difficult to juggle both family and work¹⁰⁴. At the same time, it has been argued that these needs must be met within the needs and operating limitations and commercial realities of Australian businesses¹⁰⁵.
130. The adverse effects of extended working hours on work/life balance from personal, organisational and empirical perspectives were significant themes that surfaced in written and oral submissions. As the LHMU noted, “women are especially affected by long hours in paid work – whether they work them, or live with a partner who works them”¹⁰⁶.
131. Some studies have argued that women’s careers can be restricted where a long hours culture exists¹⁰⁷. For example, a recent study found that women working in ‘male dominated’ environments were more likely to report feeling the pressure of long working hours than those in more male-female balanced organisations. The study suggested women also tended not to work longer hours, unless necessary, and “viewed presenteeism as a male trait to be avoided”¹⁰⁸.
132. The ways in which women’s working experiences are shaped by extended working hours surfaced in submissions. It was noted “extended working hours is part of a male work culture...with particular consequences for women” since women’s capacity to work extended hours is more constrained given that women continue to be the primary care giver. While working extended hours may be viewed as mandatory to career advancement by both men and women, it remains an expectation that women are less able to meet due to their family responsibilities. Thus, women are disadvantaged when working within a pervasive work culture wherein it is perceived that there is a correlation between long working hours and commitment and professionalism¹⁰⁹.
133. The Women’s Economic Policy Analysis Unit submitted the findings of a large scale survey of registered nurses in Western Australia. The findings indicate that almost half of all nurses employed full-time would prefer to work fewer hours. The authors note “a clear parallel is drawn between hours preferences, flexibility provisions and the tensions surrounding the negotiation of hours within the context of a work-family-relationship”¹¹⁰.

¹⁰⁴ Charlesworth, Campbell and Probert (2002)

¹⁰⁵ Australian Chamber of Commerce and Industry (2003a). See also Australian Chamber of Commerce and Industry (2003)

¹⁰⁶ Public submission LHMU

¹⁰⁷ Kodz et al. (2003) p207

¹⁰⁸ Simpson (1998)

¹⁰⁹ For example, public submissions: Women’s Economic Policy Analysis Unit, Curtin University; Public Sector Standards Commissioner; Peel Development Commission; LHMU; and Women’s Policy Office, Department of Community Development

¹¹⁰ Public submissions: Women’s Economic Policy Analysis Unit, Curtin University

134. Given the gendered nature of work, any measures that seek to address the culture of extended hours will necessarily affect work structures and remuneration rates for women. The pressures that families face when juggling and/or negotiating work and family issues has been extensively documented in the past decades and underpins the formulation and implementation of family-friendly policies in workplaces across Australia.

Discussion

135. The overview of literature on extended working hours indicates that there is a considerable body of research looking at the influence of work time arrangements on employees, workplaces, families and communities.
136. Empirical studies reviewed in this chapter raise some causes for concern with regard to the negative effects on health and safety of working long hours. However, the ways in which working extended hours leads or results in adverse effects on health and safety is not entirely clear. It seems likely that extended hours can either act as a stressor, which in turn leads to negative consequences, or alternatively long hours leads to fatigue, which in turn leads to negative consequences.
137. It is likely that poor quality or lack of sleep that is associated with extended working hours may also have an impact on productivity and safety. Within shiftwork literature, there is evidence for cumulative sleep debt having a large impact on observed performance and safety effects. Fatigue, tiredness and the effects of a sleep debt were echoed in oral and written submissions suggesting that some workers are experiencing the cumulative effects of continuously working extended hours.
138. The sum of the literature as well as oral and written submissions about the effects of extended working hours indicates that workers are unhappy with their work/life balance. Those who work long hours, including shiftwork, perceive that it interferes with their relationships with their partner and their children. It also interferes with their social networks and ability to engage in community activities. This review also suggests that the “long hours culture” affects women in paid employment in different ways.
139. Oral and written submissions suggest that the social fabric of local communities, particularly those in regional Western Australia has been weakened by the absence of workers – community members – in social and community activities.

Chapter 4 - Alternative Approaches to Addressing Extended Working Hours

140. The terms of reference for the Review Panel include a requirement to have regard to “specific models and/or general structures to provide guidance on the management of, and if necessary specific limits on working hours where there is strong evidence of serious health and safety issues ...”. This chapter considers the various approaches to extended or extreme working hours adopted in specific occupations and industries in Australia, as well as the schemas introduced in other jurisdictions. Where possible, evaluations of codes, guidelines and regulations are summarised as a means of ascertaining their relative merits and effectiveness.
141. It also includes the comments and preferences made in submissions about these and other mechanisms for managing or preventing the adverse consequences of extended working hours.

Educative and Awareness Raising Initiatives

142. Awareness of particular risks and hazards in workplaces is frequently addressed through the provision of educative strategies, including measures such as training kits, resource materials, guidelines and checklists. Educative strategies that inform workers, supervisors and managers about the adverse effects of long working hours and fatigue were supported in a number of submissions¹¹¹.
143. Some submissions viewed education and awareness raising as a component of a broader strategy that encompassed other measures such as a code of practice¹¹², noting that educative initiatives did not address a “competitive culture” that rewarded those that worked long hours¹¹³ and only have a significant impact if supported by an enforceable regulatory regime¹¹⁴.
144. Evidence was also presented to the Review Panel that awareness-raising initiatives were required for both the workplace and the wider community so the questions of community well-being can be addressed in a holistic and preventive perspective¹¹⁵. Without such an approach it is unlikely that community standards and expectations of work/life balance can be met.

¹¹¹ For example, submissions: Housing Industry Association; Sons of Gwalia; Dept of Industry and Resources WA; Injury Control Council (WA); Western Power; and WA Police Union.

¹¹² For example, submission: Australian Hotels Association.

¹¹³ For example, submission: State School Teachers Union.

¹¹⁴ For example, submissions: Unions WA, Injury Control Council of WA; and Workplace Standards Tasmania. Karratha Hearing, 31 October 2003 and Perth Hearing, 12 November 2003.

¹¹⁵ For example, submissions: Workplace Standards Tasmania; and Women’s Economic Policy Analysis Unit, Curtin University.

145. Other submissions stated that educative measures and awareness raising alone were sufficient to address the detrimental effects of extended working hours¹¹⁶.
146. It is noted that almost all submissions supported general education or awareness raising initiatives.

Generic Occupational Safety and Health Code

147. Codes, guidelines and other material play a pivotal role in educating all parties about their respective rights and responsibilities. Such an approach has been consistently adopted in the occupational safety and health arena to assist employers comply with regulatory standards.
148. Generic occupational safety and health codes set minimum standards in relation to a particular hazard or risk. As such codes and regulations play an important role in fleshing out the respective responsibilities of parties and importantly providing indications as how duty of care responsibilities may be met¹¹⁷.
149. Several submissions claimed that a general approach - a “one size fits all” mode - would not address the unique features of specific workplaces and industries.
150. Conversely, other submissions advocated a “general occupational safety and health code of practice that covered a reasonable level of working hours, reasonable processes for changes to working hours”¹¹⁸, with the setting of absolute limits situated within the *Occupational Safety and Health Act 1984*¹¹⁹.
151. The recent review of the *WA Occupational Safety and Health Act 1984* considered the relevance of codes of practice to the changing work environment and while acknowledging that these changes challenge the effectiveness of the occupational safety and health regime, it concludes that “in general the Act is able to address the changing work environment because the general duties of care and consultative processes under the Act are not dependent upon any particular workplace structure”¹²⁰.
152. A key attribute of the general duties of care is their all-encompassing nature. Thus, compliance with a broad statement of principle requiring the employer to ensure the health, safety and welfare of employees arguably requires attention to a wide range of hazards. While this has traditionally encompassed physical hazards such as machinery and substances, it also applies to psychosocial factors and risks arising from the new working arrangements¹²¹.

¹¹⁶ For example, submission: AMA (WA).

¹¹⁷ Quinlan (2003)

¹¹⁸ For example, submission: Finance Sector Union of Australia.

¹¹⁹ For example, submission: Commissioner for Police.

¹²⁰ Laing (2002) p212.

¹²¹ Bluff and Gunningham (2003)

Alternative Approaches

153. Occupational safety and health regimes emphasize a systematic process driven approach and, it has been contended, the elements of worker representation and participation that are central elements of the occupational health and safety regime are features that specifically enable it to meet the challenges posed by new working time arrangements and the new work environment¹²².

Industry/Occupation Specific Codes and Guidelines

154. Australian examples of industry specific guidelines and codes of practice acknowledge that extended working hours may have unintended, detrimental consequences. Without exception, these codes and guidelines explicitly acknowledge the correlation between long working hours and fatigue. This suggests that the potential disadvantages or costs of extended and excessive hours have been recognised explicitly in some occupations and industries.

155. Codes and guidelines that are specific to the requirements of a particular occupation or industry have the benefit of meeting the individual and sometimes exclusive characteristics of that workplace. Western Power, for instance, nominated guidelines for specific industries on risk assessment as the preferred approach, noting that a 'self-regulatory framework for enforcement in this area is the most effective'¹²³.

156. In other submissions¹²⁴, it was noted that voluntary codes of practice have had little impact. For instance, the Injury Control Council of WA observed that the "difficulty with this type of intervention though is that it is voluntary which may cause issues with compliance. It would also be important to make sure that the Code did not get swallowed up into existing practice and is well understood by employers across all industries"¹²⁵.

157. Analysis of industry codes suggests that while they have the advantage of being "owned" by that industry, other issues are not resolved. These include mechanisms for ensuring that the parties do actually develop a code and use standards or guidelines that are not so low as to be meaningless. Finally, government is not able to ensure compliance or enforcement. The limitations of a voluntary code are attested by the outcomes associated with the Western Australian *Fatigue Management for Commercial Drivers Code* described below.

158. Relevant voluntary codes of practice are described below.

Australian Medical Association

159. An extensive consultative process within the medical and hospital sector underpins the *National Code of Practice – Hours of Work, Shiftwork and Rostering for Hospital Doctors*. The Federal Council of the AMA adopted the code in March 1999. The code seeks to address the adverse effects of extended working hours through a risk management approach and comprises:

¹²² Walters (2003)

¹²³ For example, submission: Western Power.

¹²⁴ For example, submissions: State School Teachers Union; and; Unions WA.

¹²⁵ For example, submissions: Injury Control Council of WA.

- identifying the health and safety risks associated with extended hours and intensive work rosters;
- explaining the typical hazards associated with shift work, including extended consecutive hours in one period, lack of rest within and between work periods, speed and direction of shift rotations, and irregular and unpredictable work schedules;
- providing a guide and checklist for parties to assess risks and hazards; and
- listing standards and thresholds at which actions should be triggered and risk controls need to be considered.

160. In August 2003 the AMA and the Australian Healthcare Association launched *The Best Practice Rostering: Training and Resource Kit (Practical Tools for Rostering Doctors)*. The kit seeks to assist hospitals to implement safer and more efficient work practices for the benefit of doctors and patients by providing practical support for hospital staff to manage rosters. The kit includes information on the following:

- fatigue and its characteristics;
- AMA code and risk assessment model;
- roster design principles in the AMA code;
- managing disruptions to the roster; and
- staff involvement in roster design.

Civil Aviation Safety Authority

161. The Civil Aviation Safety Authority (CASA) currently has prescriptive legislation governing flight time and duty limitations and rest requirements. Exemptions from compliance are permitted where an approved fatigue risk management system is established but CASA is beginning to adopt a fatigue risk management plan as the preferred form of exemption, partly as a response to the recommendations of the Senate Inquiry into fatigue in the transport industry, *Beyond the Midnight Oil*¹²⁶. It is envisaged that the formal fatigue risk management scheme for the aviation industry will be released for public comment¹²⁷.

162. CASA recently adopted a policy whereby an operator seeking to renew a non-standard exemption may be required to comply with a standard exemption or, with the increasing emphasis on a scientific approach to the management of fatigue in the workplace, develop a fatigue management system incorporating the concept of fatigue risk management to replace the non-standard exemption.

¹²⁶ Standing Committee on Communications, Transport and the Arts (2000)

¹²⁷ See <http://www.casa.gov.au/avreg/business/fatigue/index.htm>

Alternative Approaches

National Transport Fatigue Code of Practice

163. The regulatory regime that governs the hours of work and rest for drivers of heavy vehicles is currently being reviewed by the National Transport Commission. The development of a Fatigue Code of Practice flows from the regulatory review.
164. A key component of the proposed regime is the imposition of a general duty to manage fatigue to minimise road safety risk. The Code details what the responsibilities are, what fatigue is and how to manage it and is built around the identification of fatigue hazards, assessment of risk and control of hazards and risks. Guidance in the Code is oriented to the three major groupings: operators/employers; owner-drivers and employed drivers.

Fatigue Management for Commercial Drivers

165. In 1998, WorkSafe (WA) developed, in conjunction with the transport sector, the Code of Practice on Fatigue Management for Commercial Drivers. A voluntary standard, endorsed by the WorkSafe Commission (WA), provided a basis for transport operators and drivers to understand their rights and responsibilities in relation to safe driving¹²⁸.
166. Subsequently, in response to industry acknowledgement that the industry had not effectively addressed the issue of fatigue in the transport sector, new health and safety regulations were developed in consultation with key transport stakeholders¹²⁹. These regulations came into effect on 1 July 2003.
167. The regulations establish an operating standard for hours of work and rest and specify other requirements for the management of fatigue for commercial vehicle operators. The operating standard is designed to promote a systematic and considered approach to organizing trip schedules and driver rosters to minimise the hazard of fatigue. The standard offers flexibility in hours of work to reflect the geography of Western Australia and the distances driven. The regulations specify penalties for breaches of the regulations in terms of failing to keep records of work and rest times, and the implementation of driver management plans¹³⁰.
168. The Fatigue Management for Commercial Vehicle Drivers Code of Practice is currently being revised, and will support the new transport regulations.

WA Chamber of Minerals and Energy

169. The Chamber of Minerals and Energy disseminates a Guideline for Workers and Management on Shiftwork and Occupational Health and Safety in the Western Australian Mining Industry.

¹²⁸ For details of the Code see <http://www.safetyline.wa.gov.au/pagebin/codewswa0231.pdf>

¹²⁹ WorkSafe submission

¹³⁰ For details of the regulations see: <http://www.safetyline.wa.gov.au/pagebin/codewswa0231.pdf>

170. It outlines the effects of shiftwork on employee health, family and social life, and work performance. It lists the effects of compressed shifts, fly-in/fly-out operations and sets out the respective responsibilities of employers and employees¹³¹.

Queensland Department of Natural Resources and Mines

171. The Queensland Department of Natural Resources and Mines developed a Guidance Note for the Management of Safety and Health Risks associated with Hours of Work Arrangements at Mining Operations¹³².
172. It provides practical guidance to companies, employers and employees on how to minimise and control risks arising from the hazards associated with working time arrangements. The Note operates in the context of specific health and safety legislation for the mining industry.

Legislative Approaches

173. During the past decade, some overseas jurisdictions have introduced legislative limits or a cap on the number of hours worked, with exemptions for industry and occupational requirements. Prominent examples of legislative working time arrangements are the *European Union Working Time Directive*, the 35-hour week in France and the Working Time Regulations implemented in the United Kingdom.
174. A regulatory approach to managing extended or excessive working hours was expressly supported in some submissions¹³³. A legislative cap was seen as necessary to facilitate a cultural change regarding overwork and extended working hours.
175. Some submissions also recommended that a legislative cap of maximum hours be accompanied by industry codes of practice developed in consultation with key stakeholders, to ensure that the codes are relevant, effective and reflect the circumstances of the particular industry or sector¹³⁴.
176. In some submissions, although no comments were made about a cap on working hours, the question of enforcement was specifically raised. For example, the Injury Control Council of WA advocates “strengthening existing legislation...”. Similarly the regulatory control of fatigue was supported, while noting that it was vital that the regulations be sufficiently flexible to meet the unique needs of individual workplaces, sectors and industries¹³⁵ and that the onus should be placed on employers to conduct a risk assessment in order to demonstrate justification for employees working additional hours¹³⁶.

¹³¹ Chamber of Minerals and Energy of Western Australia (1997)

¹³² The Guidance Note is at www.nrm.qld.gov.au/mines/publications/pdf/guidancenotes.pdf

¹³³ For example, submissions: State School Teachers' Union; Unions WA; LHMU; and Workplace Standards Commissioner, Tasmania.

¹³⁴ For example, submission: UnionsWA.

¹³⁵ For example, submission: the Department of Industry and Resources.

¹³⁶ For example, submission: Commissioner for Police.

Alternative Approaches

177. A two-tiered system of regulation was also proposed in one submission. The first level would comprise a prescriptive system and would be the default regulation. The second tier would be the alternative compliance model that would allow organisations to be exempt from the prescriptive regulations by a waiver model¹³⁷.
178. While a few submissions noted that a cap would pose particular difficulties for that sector or profession¹³⁸, other submissions opposed a cap of working hours, arguing that extended hours will not be resolved through excessive regulation, since industries and sectors are characterized by complex operational requirements and require flexible approaches¹³⁹.
179. It was also suggested that prescriptive legislative approaches that render compliance mandatory would hamper proactive measures that seek to address some of the adverse effects of extended working hours from an industry specific perspective¹⁴⁰.
180. Examples of regulatory approaches with maximum weekly or quarterly limits are described in the following section.

European Working Time Directive

181. The European Union's *Working Time Directive*¹⁴¹, passed by the European Parliament in 1993 has a strong focus on the health and safety implications of long hours, inadequate rest periods and disruptive working patterns. The Directive was introduced to limit the number of hours worked because long or abnormal working hours were thought to be detrimental to health. The main features of the European Directive include working hours of no more than 48 hours a week averaged over a 17-week period, a minimum daily rest period of 11 consecutive hours, and a minimum weekly rest period of 1 day averaged over 14 days.
182. The Directive does not apply where member countries have implemented instruments with more specific requirements. The Working Time Directive allows Member States to permit individual workers to opt out of the 48-hour limit on their working hours. The European Commission has commissioned research on the opt-out and is discussing issues with Member States and other stakeholders. It is understood that they plan to produce a communication covering the opt-out, along with doctors' on-call time and the reference period over which workers' hours are averaged.

¹³⁷ For example, submission: Public Transport Authority WA.

¹³⁸ For example, submissions: The Law Society of Western Australia; Women's Policy Office, the State School Teachers Union (WA). Perth Hearing, 12 November 2003.

¹³⁹ For example, submissions: the Department of Industry and Resources; Master Cleaners Guild of WA Inc; Australian Medical Association, WA Branch; Department of Community Development; Insurance Commission of Western Australia; and the Housing Industry Association.

¹⁴⁰ For example, submission: Australian Hotels Association WA Branch; and Sons of Gwalia.

¹⁴¹ European Union Council (1993)

United Kingdom – Working Time Regulations

183. The *Working Time Directive* was implemented in the United Kingdom through the *Working Time Regulations 1998* on 1 October 1998. The basic rights and protections established in the Regulations are:

- a limit of an average of 48 hours a week, which a worker can be required to work (though workers can choose to work more if they want to);
- a limit of an average of 8 hours work in 24 hours which night workers can be required to work;
- a right for night workers to receive free health assessments;
- a right to 11 hours rest a day;
- a right to a day off each week;
- a right to an in-work rest break if the working day is longer than six hours; and
- a right to four weeks of paid leave per year¹⁴².

184. Initially some sectors were excluded, however the Regulations were amended, with effect from 1 August 2003 to extend working time measures in full to these sectors, including junior doctors as of 1 August 2004¹⁴³.

185. In Scotland, the New Deal for Junior Doctors consistent with the European Working Time Directive was introduced in 1991. It specified that no doctor in training should work in excess of 56 hours per week and provided guidelines on minimum rest requirements appropriate to the pattern and intensity of rotas worked and became legally binding in 2001. In 2002 a Scottish hospital trust was stripped of staff for failing to meet rules on reducing junior doctors' hours¹⁴⁴.

186. Case study research comprising initial interviews were conducted about six months after the implementation of the *Working Time Regulations* in 20 organisations with follow-up interviews 12 months later. The research found that organisations had made extensive use of the individual opt-outs, derogations and collective flexibilities of the Regulations.

187. While initially employers expressed considerable concern about the costs associated with the new record-keeping requirements, at the second interview this was seen as less problematic and in some instances was seen to have positive operational benefits. Areas of impact identified in the study included a “raised profile for the importance of working time in worker health and safety”¹⁴⁵.

¹⁴² Refer to the UK Department of Trade and Industry for information on the Working Time Regulations http://www.dti.gov.uk/er/work_time_regs/index.htm#cert

¹⁴³ The UK Government consulted extensively with various sectors before removing exemptions. Their concerns and reasons for the approach adopted by the Government are at - http://www.dti.gov.uk/er/work_time_regs/index.htm

¹⁴⁴ For further information see <http://www.scotland.gov.uk/pages/news/2001/10/SE4169.aspx> and <http://news.bbc.co.uk/1/hi/scotland/2592519.stm>

¹⁴⁵ Neathey and Arrowsmith (2001)

Alternative Approaches

188. A third study was conducted more recently on the same 15 organisations with specific reference to the impact of legal developments that had occurred since 2000 including the changes to night-work calculations to include all overtime as of 6 April 2003¹⁴⁶. The research found that for most organisations, working time regulations had been given little consideration since 2000 and was only one of the factors influencing changes in working time arrangements¹⁴⁷. Most had not made any changes in order to meet or come closer to the 48-hour threshold, and only 1 of the 15 organisations had made any changes to its rest provisions¹⁴⁸. These findings support Neathey and Arrowsmith's hypothesis that working time regulations will affect working practices only when they "coalesce with an agenda dictated by market pressures"¹⁴⁹.

35 hour week in France

189. The French Parliament passed the "orientation and incentive law on the reduction of working time" in May 1998. It sets out principles for the reduction of the statutory working week and aims to encourage employers and trade unions to bargain on working hours at company and sector levels¹⁵⁰. The objectives of this initiative were primarily related to employment.
190. In effect, France implemented its 35-hour week through a combination of legislation, collective bargaining to work out the details in each sector or workplace, and significant financial incentives for firms. Salary moderation and negotiated increases in work-time flexibility – to avoid labour cost increases – were key parts of the 35-hour week package. The law does not deal with the consequences of pay reduction that may accompany decreased working hours. This is left to bargaining between unions and employers¹⁵¹.
191. A phased approach to reducing working hours was adopted. Article 1 of the law reduced the "statutory length of actual work" to 35 hours per week, from 1 January 2000, in companies employing more than 20 people and from 1 January 2002 for those in which 20 or fewer people are employed. The "statutory length of actual work" is a reference figure used as the basis for calculation. It does not mean that in 2000 and 2002, all employees concerned were working 35 hours a week or 1600 hours annually. This figure principally defines the threshold beyond which overtime is calculated. The 35-hour figure does not represent a maximum number of hours, or even the number of hours actually worked.

¹⁴⁶ Neathey (2003)

¹⁴⁷ Ibid. p7

¹⁴⁸ Ibid. p7-8

¹⁴⁹ Neathey and Arrowsmith, (2001) piii

¹⁵⁰ Bilous (1998)

¹⁵¹ Ibid. p5

192. By February 2002, just over half the private sector workforce had moved to 35 hours and in September 2002, the French Government issued an evaluation report on the implementation of the 35-hour week. It found that 53% of private sector employees were working in companies that had changed over to the 35-hour week. By the end of 2001, 90% of employees in firms with 200 or more staff were working a 35-hour week, whereas only 40% were doing so in companies with 21-49 employees and a little over 10% had done so in firms employing less than 10 people¹⁵². In half the workplaces that had changed to the 35-hour week, negotiators had opted for the working time reduction to be implemented in the form of extra annual holiday entitlement. Approximately 35% of employees have seen their working time reduced on the basis of the introduction of an annual schedule with the number of hours worked varying between slack and busy times. About 60% of employers surveyed stated that they believe the change has led to an overall improvement, while 15% claimed the opposite¹⁵³.
193. This generally positive assessment conceals mixed evaluations depending largely on the workers' qualifications and gender. Female managerial staff (73%) was the most satisfied group, while unskilled female workers were the least content (40%). Similar differentials are apparent in male rates of satisfaction with 65% of male managerial staff satisfied as against 57% for unskilled male workers¹⁵⁴.
194. It has been proposed that the annual overtime limit be increased from 130 to 180 hours to afford greater flexibility¹⁵⁵. The Bill seeks to allow employees to work a 39-hour week, but the 36th to 39th hours inclusive will be counted as special overtime, paid at a lower rate than that worked in companies that have already reduced working time¹⁵⁶. It has been suggested these proposals may remove any incentives for firms still at 39 hours per week¹⁵⁷.
195. Other research suggests that while the French approach has been successful in curtailing the length of the working week, "the gains in leisure time and falling employment appear to have been offset by a major increase in work intensification¹⁵⁸.

European Union

196. Collective bargaining on the duration of working time occurs in the European Union within the framework of statutory rules on maximum working times. However, the nature of collective bargaining differs widely between the countries, with different bargaining levels (intersectoral, sectoral, company) playing different parts¹⁵⁹.

¹⁵² Vincent (2002)

¹⁵³ *ibid.*

¹⁵⁴ *Ibid.*

¹⁵⁵ Dufour (2003) p1

¹⁵⁶ *Ibid.* p1-2

¹⁵⁷ Hayden (2003) p30

¹⁵⁸ Watson et al. (2003) p106

¹⁵⁹ Carley (2003)

Alternative Approaches

197. Bargaining coverage also varies considerably (although 70% of employees or more are covered by collective bargaining in the majority of European Union countries)¹⁶⁰. Table 7 gives the statutory maximum hours that can be worked each week in the European Union and other European countries¹⁶¹.

Table 7: Statutory maximum working week

Country	Maximum hours per week
Denmark	48
France	48
Germany	48
Greece	48
Hungary	48
Ireland	48
Italy	48
Luxembourg	48
Netherlands	48
UK	48
Austria	40
Finland	40
Norway	40
Portugal	40
Slovakia	40
Spain	40
Sweden	40
Belgium	39

198. The above table indicates that while several countries have adopted the maximum set by the European Working Time Directive, others operate with a lower limit of 40 hours.

199. Statutory maximum hours may be exceeded through working time flexibility schemes consistent with the European Directive. Examples of flexible working schemes include the following:

- In Austria, weekly hours may be varied up to 50 over a reference period, by agreement, if an average 40-hour week is maintained;
- In the Netherlands, the 48-hour maximum must be maintained over a 13-week reference period. If no agreement is reached between employer and trade union (or works council), statutory maximum hours are nine per day, but by agreement daily hours may be extended to 12, as long as average weekly hours do not exceed 60 over a four-week reference period (and do not exceed 48 over a 13-week period); and,

¹⁶⁰ Ibid. p5

¹⁶¹ Ibid.

- In Norway, average weekly hours may vary and be as high as 48, as long as the 40-hour maximum is maintained over a reference period of up to one year. In specific circumstances and by agreement with union representatives, working time may be as long as 54 hours a week and 10 hours a day, for up to six consecutive weeks¹⁶².

200. These countries have a form of statutory maximum working day as indicated in Table 8¹⁶³.

Table 8: Statutory maximum working day

Country	Maximum hours per day
Denmark	13
Ireland	13
Italy	13
UK	13
Hungary	12
Austria	10
France	10
Luxembourg	10
Portugal	10
Netherlands	9
Norway	9
Spain	9
Belgium	8
Finland	8
Germany	8
Greece	8
Slovakia	8

201. Daily hours may often be higher in the context of working time flexibility schemes. For example in Germany, daily hours may be extended up to 10, if an eight-hour average is maintained over a 24-week reference period.

Industrial Approaches

202. Working hours may be viewed as a fundamental aspect of the terms and conditions of employment and to that extent some submissions proposed changes to the industrial relations framework as a means of addressing the detrimental effects of extended or excessive working hours. These proposals included amendment of awards and changes to the *Minimum Conditions of Employment Act 1993*.

¹⁶² Ibid. p7

¹⁶³ Ibid. p10

Alternative Approaches

Australia - ACTU Test Case on Reasonable Hours

203. Some submissions noted the Australian Industrial Relation Commission's decision in relation to the ACTU claim for reasonable working hours and suggested it 'provides a model for the amendment of all federal awards...that could well lead to flow on effects with State awards'¹⁶⁴. In a similar vein the LHMU stated that it may be appropriate for the WA Government to apply to the WA Industrial Relations Commission to have the adoption of the ACTU Reasonable Hours Test Case Standard heard as a test case under the Western Australian *Industrial Relations Act 1979*.
204. The following details the ACTU test case on reasonable hours and the decision of the Australian Industrial Relations Commission.
205. In May 2001 the ACTU lodged an application for a test case on reasonable hours before the Australian Industrial Relations Commission (AIRC). The ACTU sought an award clause that would outline the factors to be considered in determining what are unreasonable hours of work and compensate employees with extra paid leave after certain 'extreme' hours have been worked.
206. The proposed clause did not specify a numerical limit to hours worked, since the underlying proposition was that an award standard was necessary to recognise and regulate non-standard hours, not prevent them from being worked. The ACTU argued that since there is a regulatory vacuum in relation to long working hours, the proposed clause would provide an award benchmark to establish reasonable hours. Once a reasonable hours clause had been established as an award standard, it could then provide a basis for setting a specified limit on working hours when applied to a particular industry or employer through enterprise bargaining.
207. There were three parts to the award clause sought by the ACTU application:
- Sub clause 1, *Reasonable Hours of Work*, prohibiting an employer from requiring an employee to work unreasonable hours of work, with a number of factors or criteria to be considered in making such an assessment. These factors would include the total amount of hours worked on any particular day or over an extended period, the number of hours worked without a break, an employee's workload, the risk of fatigue, and the employee's family responsibilities and social and community life.
 - Sub clause 2, *Reasonable Overtime*, confirming the existing right of employers to require employees to work reasonable overtime, but giving employees a right to refuse that overtime.

¹⁶⁴ For example, submission: Department of Community Development.

- Sub clause 3, *Paid Breaks after Extreme Working Hours*, compensating employees with extra paid leave after certain hours have been exceeded. The proposed clause specified that a person working an average of 60 hours a week or 26 days over four weeks, an average of 54 hours per week or 51 days over 8 weeks, or an average of 48 hours per week or 74 days over a 12 week period, would be entitled to a paid break of 2 full days, in addition to any ordinary time off they may be entitled to, before working again. This reflected the evidence that employees working more than 48 hours a week are at significantly greater risk of poor health, safety and social outcomes.

208. On 23 July 2002 the Full Bench of the AIRC released its decision in the Reasonable Hours Test Case. The Full Bench decision rejected the ACTU application, but awarded employees a corresponding right under the award to refuse overtime where it would result in unreasonable working hours. The decision established that the right to refuse overtime would be determined having regard to:

- any risk to employee health and safety;
- an employee's personal circumstances, including any family responsibilities;
- the needs of the workplace or enterprise;
- notice given by the employer of the overtime and by the employees intending to refuse it; and
- any other relevant matter.

209. The decision pointed out that while employees already have an implicit right to refuse overtime, an explicit right in the award would give employees a firmer basis to do so.

210. The AIRC rejected the proposed sub clause 1, finding the prohibition on unreasonable hours of work was too imprecise and could undermine the certainty that is provided by the existing notion of a specified number of ordinary hours in a standard working week. It also found the question of what hours are unreasonable was likely to create disharmony at the enterprise level. In terms of the factors the ACTU sought to be considered in determining if hours were unreasonable, the Full Bench found they focused unduly on the needs of employees without reference to the circumstances of the employer and the business.

Alternative Approaches

211. The AIRC also rejected the proposed sub clause 3, concluding that it did not address the problems of working extreme hours and instead sought to provide a benefit to those working them, which could in fact encourage employees to work those hours. The decision suggests that if the ACTU wanted to remedy the problems it argued are caused by long hours, a more appropriate course would have been to seek a prohibition on such hours being worked. The Full Bench found the clause would be impractical in at least some awards given the diversity in hours of work arrangements.
212. The ACTU application was heard together with an ACCI counter-claim providing for a system of annualised wages and allowing employers and employees to negotiate extra working hours. The AIRC did not grant the clause sought.
213. In making its decision, the AIRC accepted much of the evidence about the increase in working hours in Australia over the last 20 years. The Full Bench was satisfied that long hours could have adverse affects on health and safety, productivity and family and community life. It noted particularly the possible risks of fatigue caused by long hours. The Full Bench concluded its decision as follows:

“Working time arrangements and patterns of hours worked have changed significantly in Australia over recent decades. There has been an upward trend in the average working hours of full-time employees over the past 20 years such that there has been an increase in the proportion of employees working long hours. There is adverse health consequences associated with working long hours, particularly when associated with shift work. In addition to the adverse affect of working long hours on employees, there are adverse effects on their families and communities. We have sought to address some of these issues by creating an explicit award right for an employee to refuse to work overtime in circumstances where it would result in the working of unreasonable hours”¹⁶⁵.

214. The decision resulted in the insertion of the overtime clause into the 14 federal awards that were the vehicle for the test case application. The clause can then be inserted on application into all federal awards that specify ordinary time and provide for overtime. As the case is restricted to the award system, it will not have any direct impact on those groups working long hours outside the award system such as the self-employed and many professionals.
215. The AIRC stated it may be appropriate for the award provision to be reviewed after it has been in operation for some time.

Awards and Agreements

216. Generally, awards set standard working hours at 38 hours per week. Regulation of those hours has occurred mainly through penalties associated with overtime.

¹⁶⁵ Australian Industrial Relations Commission (2002) para 287

217. Several submissions noted that existing awards address issues associated with overtime, penalty rates and fatigue, and that this was largely adequate to deal with extended working hours¹⁶⁶. The Shop, Distributive and Allied Employees' Association of Western Australia noted that retail workers with award coverage were able to access meal, rest and shift breaks, unlike those who were casual employees employed under workplace agreements. Some researchers are of the view that the weakening of unions and collective negotiation has contributed to the diminishing rights of employees¹⁶⁷.
218. Since the early 1990's a growing proportion of employees have negotiated their terms and conditions of employment, including working time arrangements through collective enterprise or individual workplace agreements under relevant State or Commonwealth legislation. Some submissions noted bargaining processes had been used to negotiate initiatives that seek to address the implications of long working hours in their sector¹⁶⁸.
219. For example, the Australian Medical Association (WA) in its submission noted that in an attempt to ensure compliance with the *Safe Hours Code*, the Association negotiated the inclusion of a clause about hours of work, shiftwork and rostering into the *Medical Practitioners (Metropolitan Health Service) AMA Industrial Agreement 2002*. The AMA also stated it has commenced negotiating the inclusion of a clause with specific provisions that attempt to deal with rostering parameters that may lead to excessive hours in its next industrial agreement.
220. The effectiveness of bargaining processes was also raised by the Commonwealth Department of Employment and Workplace Relations, who stated in their submission that analysis of certified agreements from DEWR's Workplace Agreements Database suggests that "hours of work provisions in agreements are not skewed to employer-only flexibility ... Agreement making is the prime avenue for catering to the differing and changing needs of employers and employees".
221. Conversely, it was also claimed that the bargaining processes have favoured employers and that "invariably this means loss of rights for employees to influence when their hours of work will be"¹⁶⁹.

Minimum Conditions of Employment Act 1993

222. The *Minimum Conditions of Employment Act 1993* underpins conditions for a substantial proportion of employees in Western Australia. The Act provides minimum standards on a range of employment entitlements such as minimum rates of pay, annual leave, sick leave, bereavement leave, parental leave, public holidays and job search leave in the event of redundancy.

¹⁶⁶ For example, public submissions: Motor Trade Association of Western Australia; and the Shop, Distributive and Allied Employees' Association, WA.

¹⁶⁷ See for example, Kodz et al. (2003) p62

¹⁶⁸ For example, public submissions: The State School Teachers Union; Australian Medical Association, WA Branch; and Department of Industry and Resources.

¹⁶⁹ For example, public submission: Finance Sector Union of Australia.

Alternative Approaches

223. The standard working hours on which the minimum weekly wage is based was reduced from 40 to 38 hours per week by the *Labour Relations Reform Act 2002*. This established consistency between the minimum conditions set out in the *Minimum Conditions of Employment Act* and the vast majority of awards that provide for a 38-hour week¹⁷⁰. However, the Act does not set a maximum daily or weekly limit on hours.
224. Some submissions advocated setting a cap on maximum hours by amending this Act¹⁷¹. The LHMU stated “the only possible approach to ensure workers have industrial rights to refuse unreasonable working hours” is through amendments to the *Minimum Conditions of Employment Act*. This view has some support in recent research examining working time arrangements and extended working hours. For example the Griffith Work Time Project advocated a regulatory framework arguing that since employers largely drive working hours, financial constraints such as overtime and penalty rates are not sufficient to independently address issues such as workplace cultures and unpaid overtime¹⁷².

Recent Australian Developments

225. While no Australian jurisdiction has adopted any mechanisms to address the myriad issues surrounding extended working hours, recent developments are pertinent.
226. In July 2003 the Tasmanian Director of Industry Safety, served Copper Mines of Tasmania and Barminto Mining Contractors with a notice under section 39 of the Tasmanian *Workplace Health and Safety Act 1995* that requires the cessation of patterns of work that do not reduce the risk of injury and loss of health to the lowest reasonably practicable level. The notice resulted in significant change to the total hours worked and roster patterns in the mines concerned.
227. The Queensland Department of Industrial Relations in its submission to this review stated that voluntary codes of practice to address extended working hours are being considered as a means of addressing working time arrangements. Mr Chris Maxwell QC, in his review of the Victorian *Occupational Health and Safety Act 1985*, identified long working hours as a major new work-related health and safety risk¹⁷³. A discussion paper of the Victorian legislation was released for public comment in October 2003.

¹⁷⁰ For details of amendments to the *Minimum Conditions of Employment Act 1993* and the *Labour Relations Reform Act 2002* refer to: <http://www.docep.wa.gov.au/fairgo/>

¹⁷¹ For example, public submissions: State School teachers Union; UnionsWA; and LHMU.

¹⁷² Griffith Work Time Project. (2003) p38-39

¹⁷³ See http://www.workcover.vic.gov.au/dir090/vwa/home.nsf/pages/OHSAct_review

Discussion

228. This review of the various approaches to addressing the adverse effects of extended working hours in contemporary society indicates the differing strengths of each approach.
229. While a legislative cap, in effect, defines what constitutes unreasonable working hours, it does not address the characteristics and features that are specific to particular occupations, industries or workplaces. Derogations or cop-out provisions addressed these unique characteristics. As indicated by the evaluations of the Working Time Directive in the United Kingdom, a number of workplaces and occupations initially relied on these derogations.
230. However, while industry codes can reflect the unique features of individual workplaces, they are constrained by their voluntary aspects so that some workplaces in a particular industry are able to disregard the industry code. Moreover, they also rely on clear definitions of “industry” and “occupation” and a strong industry body. Neither of these are features of current working time arrangements.
231. Principles and standards can be set in an occupational health and safety code with its inherent compliance mechanisms. However, such a code may not address workplace characteristics unique to an industry or occupation and may have to be supplemented by an industry specific code.
232. Each approach has been phased in over a period, with the Working Time Regulation in the United Kingdom staggered over a decade. Research, evaluation and awareness raising activities have accompanied the introduction of legislative amendments.

Chapter 5 - Recommendations

Introduction

233. The Review Panel has considered the issues related to working extended hours from various perspectives. It is clear there are adverse effects of working extended hours on workers, their families and their local communities. At the same time, the preference of many employees to work long hours and the economic and business imperatives of the current global and technological environment can be neither sidelined nor ignored.
234. Macro-level factors that influence workplaces as well as the strong community interest in the social and familial effects of working extended hours have been taken into account. The Review Panel received a number of submissions that suggested extended working hours impact negatively on family and social networks in local communities, particularly in regional Western Australia.
235. In reviewing statistical and other information on trends in working hours in Western Australia and Australia, the Review Panel has recognised that there is no common definition of extended working hours. The Review Panel also acknowledges that it was not able to make a determination as to what constitutes extended hours.
236. There is a diverse range of views on what constitutes extended working hours with some perceiving working more than 40 hours a week as extended hours, while others view it as an average of 48 hours per week, and yet others view it as an average of 60 or more hours per week. There is also debate regarding the appropriate period over which to determine average weekly hours. Notwithstanding these observations, it is apparent from current labour market trends that average working hours have increased and that a small, but growing, proportion of Western Australians work over 60 hours a week on average. Oral and written submissions as well as the findings of recent empirical studies confirm that a minority of workers continuously work extended hours.
237. There is some consensus that working time arrangements have altered substantially and indeed expanded to cover a new array of options in the course of the past twenty or so years, but there is less concurrence about the relative merits and impact of the span and duration of working time arrangements upon individuals, workplaces and communities; the impetus that continues to underpin this reconfiguration of work; and the beneficiaries of these new working time arrangements.
238. The Review Panel considered a breadth of responses to the hazards and risks associated with working hours arrangements. The Review Panel noted the range of approaches, from complete self-regulation through to prescriptive regulation, implemented in various jurisdictions around the world or advocated in oral and written submissions to the Review.

239. The Review Panel received a number of submissions advocating self-regulation as an appropriate response to the occupational safety and health and other issues associated with extended working hours. However, a majority of the Review Panel believes that self-regulation alone would not result in real changes to work practices. In particular, the Review Panel noted the difficulties of relying on a self-regulatory approach to fatigue management in the Western Australian transport industry. These problems are now being more effectively managed through the implementation of regulatory controls.
240. Others have considered the relative merits of frameworks based on regulation and quasi-regulation in relation to managing hours, particularly extended hours of work¹⁷⁴. Campbell noted in his submission that the challenge is not about regulation or unregulation, but rather to “devise appropriate and effective forms of regulation that can balance employee interests, employer interests and broader social goals”.
241. In considering a mechanism of addressing the adverse effects of extended working hours, the Review Panel considered the following key matters:
- current knowledge of health and safety hazards and risks associated with extended working hours;
 - the trend towards flexible work arrangements, involving the use of subcontractors, labour-hire employees, outsourcing, temporary and home-based work; and
 - the need for flexible, collaborative and participatory approaches to the effective management of safety and health issues within workplaces.
242. On the basis of its considerations the Review Panel is of the view that extended working hours arrangements can constitute a hazard to the safety and health of employees. A majority of the Review Panel is of the view that an innovative and practical approach that places occupational safety and health as the central focus can prevent the adverse effects of extended working hours from developing into a major workplace and community problem.
243. The Review Panel recommends an integrated response to the issues associated with extended working hours. The recommended approach, based on a general Code of Practice under the *Occupational Safety and Health Act 1984* seeks to balance the sometimes conflicting interests of workers and employers within the principles of occupational safety and health and broad societal concerns. The Code of Practice would be accompanied by strong educative and awareness-raising initiatives.

¹⁷⁴ Johnstone (2002)

Recommendations

244. A panel member who believes that the industrial relations framework provides a more consistent and comprehensive mechanism for addressing extended working hours expressed reservations about this approach – see Attachment IV. A different member, while accepting the code of practice approach, expressed concern at the prescriptive nature of the parameters proposed for inclusion in the code. See Attachment III for this member’s dissenting comments and Attachment IV for the Chair’s rejoinder.

Working Hours Code of Practice

245. The *Occupational Safety and Health Act 1984* and the *Mines Safety and Inspection Act 1994* establish the broad responsibilities of all parties in the workplace with regard to safety and health. The legislation establishes a duty on all employers to provide and maintain, as far as is practicable, a working environment that does not expose employees to hazards. On the basis of its considerations, the Review Panel believes that a Working Hours Code of Practice can address the adverse consequences of extended working hours.

246. The Review Panel shares the view that in order for regulatory frameworks to be effective, they should:

- not be unduly prescriptive;
- be consistent with other laws, agreements and international obligations;
- be clear and concise;
- be enforceable; and
- be administered by accountable bodies in a fair and consistent manner, and should be monitored periodically.¹⁷⁵

247. The Working Hours Code would meet these elements in the context of the available information on the effects of extended working hours and the general duty of care obligations of employers. The Code would enable guidelines to be issued on key aspects of the management of hazards associated with working hours arrangements while providing flexibility for employers in ensuring their general duty of care obligations are met. The Code would facilitate appropriate requirements of the legislation as they relate to working hours.

248. The Code would be designed to provide a platform for industry codes that provide guidance relevant to working hours issues that are specific to an industry, identified through risk assessment processes. Industry groups would be encouraged to develop industry specific codes consistent with the principles and guidelines established by the Working Hours Code.

¹⁷⁵ Banks (2003)

249. Some submissions to the Review Panel recommended industry codes of practice as the most effective means of addressing extended working hours. While the Review Panel strongly supports the development of industry specific codes on working hours, it considers that a general code is an essential requirement at this stage to ensure working hours are addressed broadly and comprehensively as soon as possible and to avoid fragmented approaches across industries. The Review Panel also noted that few industries have the representative structures that are essential for the development and implementation of industry specific codes.
250. The Review Panel notes that some view codes of practice as 'quasi-regulation' and that the notion of "regulation" can generate a measure of concern. However, the Review Panel is of the view that the proposed approach does not place an undue burden upon employers. Rather, it reflects the systematic risk assessment processes that have been undertaken by many organisations in response to hazards to safety and health within the workplace, including those associated with working extended hours.
251. The Review Panel is of the view that the Working Hours Code should apply to all industries and notes that Parliament is considering amendments to extend the jurisdiction of the *Occupational Safety and Health Act 1984* to the mining industry. The Panel notes that while it may be necessary for the Code to be jointly issued under the *Occupational Safety and Health Act 1984* and the *Mines Safety and Inspection Act 1994*, at present, this may not be necessary in late 2004. Specific parameters are recommended for fly in / fly out (FIFO) operations reflecting the unique requirements of such working environments and the lower risk to personal and public safety of such work practices as compared to residential or non-FIFO operations.

Recommendation 1:

The Review Panel unanimously recommends that the Commission for Occupational Safety and Health develop a Working Hours Code of Practice under the *Occupational Safety and Health Act 1984*. The Code should apply to all workplaces and provide general information on the management of risks associated with working hours. A majority of the Review Panel supported specific statements on the key parameters of working hours arrangements.

252. The Review Panel recommends the Code be structured so as to provide general guidance on the management of working hours arrangements as well as specific requirements for addressing the particular issues associated with extended working hours. It is envisaged that the Code would provide that where employees work extended hours (as defined) the employer be required to establish formal risk management processes. These processes could include establishing fatigue prevention plans or compliance with industry codes of practice.

Recommendations

Recommendation 2:

A majority of the Review Panel recommend that the Working Hours Code and any related industry codes should consider parameters on all of the following key aspects of working hours arrangements:

Work

- Defined as activity for which an employee is compensated.

Average Working Hours

- Other than FIFO

Maximum hours per week 56

Total hours over 3 months 624

- FIFO operations

Total hours over 3 months 728

Daily Work Hours and Related Travel (whether or not in charge of the vehicle)

- Maximum working hours plus travel 13 hours
- For travel time in excess of one hour, work time is to be reduced proportionately

Sequential Night Shifts (for those working 8 hours or more AND between 10.00 pm and 6.00 am)

Operation Type	Shift Length	Maximum Sequential Night Shifts
Other than FIFO		
	8 hours	6
	10 hours	5
	12 hours	4
FIFO operations		
	8 hours	7
	10 hours	6
	12 hours	6

Period of non-work following a sequence of night shifts

- FIFO Minimum of 24 hours
- Non FIFO Minimum of 48 hours

Timing of End of Night Shift (for those working 8 hours or more AND between 10.00 pm and 6.00 am)

- Not after 10.00am
- Not before 6.00am

Rest Breaks

- 8/10 hour shifts minimum 45 minutes
- 10/12 hour shifts minimum 60 minutes
- Not less than two breaks to be agreed mutually

Split Shifts (for those working 8 hours or more AND between 10.00 pm and 6.00 am)

- All work and related travel to be completed within a 13 hour period.

Return from Rest and Recreation to FIFO Operations

- Maximum of 8 hr shift if shift commenced in pm.

Roster Changes

- To be notified at least 1 week in advance.

Education and Training

- Comprehensive, competency based training by qualified trainers for all workers required to work at night (between 10.00pm and 6.00am).

Health Assessment / Monitoring

- Free health assessment to be available for all workers exceeding an average of 48 hours per week over the quarter year or who work at night on a regular basis.

Working Hours Policy Statements

- Working hours policy statements to be displayed in all workplaces where average of 48 hours per week is exceeded for any employees.

Working Hours Records

- Auditable records of employees' times of work to be maintained for a period of 6 years.

Management of Incidents

- Incidents involving workers exceeding an average of 48 hours per week over the quarter year or who work at night on a regular basis, to be investigated having regard to hours of work and non work in the previous 48 hours.

Recommendations

253. In light of emerging trends regarding working hours, recognition by particular industry bodies of the adverse effects of extended working hours demonstrated by their implementation of fatigue management plans and support in submissions for Government action, the Review Panel believes that the Working Hours Code of Practice should be developed and implemented as soon as practicable. The Review Panel also notes that existing contractual and other arrangements need to be considered in the implementation of the code. However, implementation of the Code should not provide an opportunity for contractual arrangements to be used to avoid compliance with the provisions of the Code beyond an appropriate transition period.

Recommendation 3:

A majority of the Review Panel recommend that the Working Hours Code of Practice be implemented effective July 2005 subject to appropriate transitional arrangements.

254. The Review Panel noted information provided in submissions that there are circumstances where Western Australian employees work excessive hours either on a structured or ad hoc basis. The Panel acknowledged that this may occur as a result of workers wishing to gain additional monetary compensation and/or because of business and economic considerations on the part of employers. Notwithstanding the motivations that underpin excessive working hours, there are significant health, safety and social consequences.

255. The Review Panel believes that excessive working hours are unsustainable in terms of the risks to the health and safety of the workers themselves, to their work colleagues and to the public. In addition to medium and long-term negative impacts on the health of workers, excessive working hours generate safety issues associated with fatigue, particularly where workers operate mechanical equipment or are required to travel to and from work. Moreover, the community has clear expectations about public safety that are largely reflected in the hazards and risks in the occupational safety and health framework and at common law.

256. The Review Panel recognises that establishing maximum hours requires consideration of a range of factors including job demands and the personal attributes and capabilities of workers. The Code should provide clear guidance on determining maximum working hours in particular circumstances. A panel member was of the view that an alternative option was also viable – namely that the Government should consider amending the State *Minimum Conditions of Employment Act 1993* to provide that employees cannot be required to work unreasonable hours.

Recommendation 4:

A majority of the Review Panel recommend the Working Hours Code contain provisions that establish the maximum hours that may be worked in particular circumstances.

Review of the Working Hours Code

257. Demographic, socio-economic and technological trends will continue to revise the meaning and place of work. Moreover, workplace bargaining and regulation will also influence the terms and conditions of employment, including working time arrangements. These evolving trends are likely to shape the duration and distribution of working hours, making it imperative that the Code is reviewed within three years of its implementation.
258. The review would determine the extent to which the Working Hours Code has been effective in preventing the adverse effects of extended working hours across the West Australian workforce. It would also consider whether educative initiatives that promote work/life balance in the workplace, have been successful in influencing organisational cultures to recognise the social dimensions of workers' lives.
259. The review would enable Government to make an informed decision as to whether legislative amendments to regulate working hours are warranted in Western Australia.

Recommendation 5:

The Review Panel unanimously recommends that the effectiveness of the Working Hours Code of Practice be reviewed by Government within 3 years of its implementation to ascertain whether a regulatory regime is required. The effectiveness of the Code would be determined by compliance and social benefit.

Work/Life Balance

260. The issue of work/life balance was a recurrent theme in oral and written submissions to the Review. These submissions and the findings of qualitative studies indicate that the toll that long hours places on families is considerable, and families may be disadvantaged by the periodic and prolonged absence of one parent, usually the father.
261. The Review Panel also notes that there is growing evidence that suggests that both men and women may find meeting their responsibilities and obligations to work and family difficult and respondents in surveys repeated their dissatisfaction with extended working hours. In this context, a "long hours culture" makes working life difficult for women with child bearing and rearing responsibilities.

Recommendations

262. Work-life balance is about adjusting working patterns so as to enable workers, regardless of their age, race or gender, to combine work with their other responsibilities or aspirations. The Review Panel notes that initiatives, such as flexible hours and work-based childcare have been introduced in the private, public and community sectors to facilitate work/life balance. In addition, relevant state and Commonwealth bodies have undertaken educative activities to promote awareness of the benefits to be gained by enabling workers to enjoy an appropriate work/life balance. To date, none have specifically addressed the detrimental effects of a “long working hours culture” and the Review Panel considers initiatives should be developed to both raise awareness of the working hours issue and promote effective personal and organisational strategies for addressing the negative impact of extended working hours.

Recommendation 6:

The Review Panel unanimously recommends that public awareness and educative initiatives be undertaken by Government to raise awareness of work/life balance issues and to inform the community about the social and health effects of extended working hours.

Additional Research

263. Further methodologically robust research is needed on the relationship between long working hours and health and safety outcomes. There have been relatively few longitudinal or prospective studies that control for mediating variables on working time arrangements.
264. The identification and measurement of fatigue has been central to several empirical studies on extended working hours. However, new working time arrangements as well as new modes of working may also affect the health of workers
265. Much of the literature examining the impact of extended working hours on workers has treated workers as a homogenous category. Research that specifically examines working hours arrangements that affect the experiences of women in paid employment would identify new ways of challenging organisational cultures.
266. Recent research has begun to quantitatively assess the links between work stress, satisfaction with hours worked and workers’ satisfaction with their family life. However, quantitative and qualitative information that is industry and occupation specific is limited. Another area relates to new working time arrangements and work/life practices in the context of working hours.

267. Prior to and concurrent with the introduction of the Code, it is important that ongoing longitudinal studies of working hours and morbidity in Western Australia be established to enable the impact of the Working Hours Code to be assessed on a continuing basis.

Recommendation 7:

The Review Panel unanimously recommends that additional research be undertaken to ascertain the effects of extended working hours on safety and morbidity in Western Australia before and after introduction of the Code.

Attachments

Attachment I: Submissions to the Review Panel

Ambulance Employees Australia - WA Branch
Australian Hotels Association
Australian Medical Association WA
Australian Workers Union (WA)
Bunbury Port Authority
Challenger TAFE -
Chamber of Commerce and Industry
Chamber of Minerals and Energy of WA Inc.
Commissioner of Police
CSA/CPSU
Curtin University, Women's Economic Analysis Policy Unit
Department for Community Development
Department of Housing and Works
Department of Industry & Resources
Department of Infrastructure, Energy and Resources - Workplace Standards Tasmania
Edith Cowan University
Federal Department of Employment and Workplace Relations
Finance Sector Union of Australia
Fire and Emergency Services of Western Australia
Fremantle Community and Legal Advocacy Centre
Goldfields Esperance Area Consultative Committee Inc
Goldfields Men's Health Incorporated
Great Southern Development Commission
Housing Industry Association
Iain Campbell – RMIT University
Individual 1
Individual 10
Individual 11
Individual 12
Individual 13
Individual 2
Individual 3
Individual 4
Individual 5
Individual 6
Individual 7
Individual 8
Individual 9
Industrial Relations Victoria
Injury Control Council of WA
Insurance Commission of WA
Law Society of WA
Liquor, Hospitality and Miscellaneous Workers Union
Master Cleaners Guild of WA
Member for Eyre
Mid West Development Commission
Mineral Drilling Association of Aust
Mines Occupational Safety and Health Advisory Board
Motor trade Association of WA (Inc)
National Council of Women WA Branch
Office of Multicultural Interests, Department of Premier and Cabinet
Office of the Public Sector Standards Commissioner
Peel Development Commission
Perth Zoo
Pilbara Division of General Practice
Public Transport Authority

QLD Dept of Industrial Relations
SA WorkCover Corporation
Shire of Augusta-Margaret River
Shire of Dumleyung
Shire of Mount Magnet
Shop, Distributive and Allied Employees' Assoc of WA
Small Business Development Corporation
Sons of Gwalia
State School Teachers Union
State Supply Commission
UnionsWA
Victorian WorkSafe
WA Farmers Federation
WA Fruit Growers Association
WA Police Union of Workers
Western Australian Industrial Relations Commission
Western Power
WMC Resources Ltd
Women's Policy Office – Department of Community Development
WorkSafe Division, Department of Consumer and Employment Protection s

Attachment II: Appraisal of Research Approaches

Empirical studies on extended or long working hours originate from a variety of countries, and examine a range of populations, occupations, industries and jobs. This makes comparisons between studies difficult but it remains important to note the limitations of the research base. The intention is not to criticise particular methodological approaches, but rather to highlight some of the reasons why it has been difficult for the Review Panel to draw unequivocal conclusions.

At the outset, it is acknowledged that there is little consensus on what specifically constitutes “extended” working hours. Indeed, a characteristic of many empirical studies exploring the impact of long, extended and excessive working hours is that varying definitions of each term is used in differing studies. This may be attributed, in part, to variations in the definitions of standard or ordinary working hours in awards and enterprise agreements, reflecting the specific requirements of occupations and industries.

Such variations are compounded by the conflation between research findings that concern individuals who may be working longer hours because of increasing workloads and job demands, job insecurity and performance standards and pressures¹⁷⁶ and findings that relate to shift work. Most research in the area of hours of work concerns shiftwork¹⁷⁷. Although partially relevant, this research is not entirely applicable to the concept of long working hours during the day.

Shiftwork tends to imply working periodically and regularly outside the normal daylight hours that humans are “programmed” to operate in and this inevitably disrupts human circadian rhythms. These working arrangements are likely to have a much more complex interaction with health and safety than simple extensions to the “normal” 8-hour working day¹⁷⁸.

These methodological issues may be exacerbated by the significant differences in how working hours are defined in practice. In some surveys it is assumed that this relates to the actual hours worked, while others conceptualise as it the “usual” hours worked either per day or the average hours per day or per week. In addition, there are variations in how information is collected and recollected, for example through detailed entries in work diaries, recall or time sheets. Such variations also render comparisons between the findings of different studies problematic.

While individuals’ working hours are usually calculated as an average per week, annualised hours are also used to measure working hours. This shifts the focus on the number of hours worked on an average day or week to the number worked in a year.

¹⁷⁶ Sparks et al.(1997)

¹⁷⁷ Spurgeon, Harrington and Cooper (1997)

¹⁷⁸ Spurgeon et al. (1997); and White, and Beswick (2003)

Commuting time, that is travel to and from work, can affect the length of working hours but are usually not included in calculations of working hours. Those who travel as part of their work, including those who stay away from home overnight, as well as those who are on-call, pose definitional problems when attempting to ascertain working hours, including extended working hours. Definitional ambiguities also arise with workers who are on-call, but free to engage in their own personal pursuits.

Determining the working hours of those who work from home (telecommuters, the self-employed, home workers and others using telecommunications to reach their business or client) is also problematic because they may interrupt their work to attend to personal or non-work related matters.

In addition, while some quantitative studies use a random sample of the population, others have relied on self-selection in a particular industry. In some instances, it is unlikely that the sample selection process, frame or size is statistically valid, although, such studies proffer qualitative insights about experiences and attitudes. To date, it does not appear that any longitudinal study of extended hours has been undertaken, with a statistically valid random sample of workers, representative of a cross-section of industries and occupations in Australia.

Surveys based on self-reports also pose particular methodological issues. On the one hand, as Wooden observes, the “popularity of self-report measures lies, in large part, in the ease with which they can be employed to both directly measure, and to assist in drawing inferences about, human behaviour”¹⁷⁹. However, discrepancies are apparent in self-reports – assessments based on individuals’ perceptions of how long they regularly work, which often do not tally with the employer’s assessment of the hours worked by employees. On the other hand, questionnaires administered face-to-face, via the telephone, email or post through their reliance on closed questions rarely afford the types of insights offered in qualitative studies.

Empirical studies focus on ascertaining the preferences and experiences of workers either in a generic sense or with regard to a particular characteristic. Some studies have examined the general preferences of workers with respect to long working hours, while others have focussed specifically on the experiences of fathers or of workers in a particular occupation, such as medicine. For the most part, responses are not cross tabulated to show working hours or preferences for hours with regard to characteristics such as family responsibilities and gender. Thus, for example the preferred option of males in a particular occupation may not be the desired option of females in the same occupation, or for that matter of any other occupation. Accordingly it is difficult to extrapolate findings based on one industry or occupation to another and draw general conclusions.

¹⁷⁹ Wooden and Warren (2003)

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Isolating the characteristics that contribute to satisfaction with work is at best, protracted. In the first instance, there are a number of different dimensions to work, including employment status (permanent, fixed term contract and casual), rates of remuneration, general working conditions such as relationships with co-workers, supervisors and managers, levels of value congruence between the worker and organisational culture and participation in decision-making processes. Thus, determining the role and extent to which elements such as duration and distribution of working hours alone, play or contribute to employee satisfaction general with their work, is challenging.

These conceptual and methodological issues largely reflect the conscious decisions made by researchers and public policy makers to draw conclusions based on limited or inadequate data that was, nonetheless, the best data available at that time. These factors may also account for the disparate findings on a similar theme that surface from a critical appraisal of the relevant literature.

Attachment III: Dissenting Report of Mr David Todd

The purpose of this dissenting report is to present a different perspective on appropriate strategies to address the issues associated with extended working hours. Whilst I accept that the development of a general Working Hours Code may be politically necessary and is the preferred direction of other Review Panel members (Recommendation 1), I do not support the prescriptive approach that is inherent in the Review Panel's recommendations concerning parameters to be incorporated in the code (Recommendations 2 and 4). If a code is to be developed it should be based on a Risk Management approach.

In short, a risk management approach reflects best practice, while a prescriptive approach trades off innovation and excellence for greater enforceability and compliance.

The recommended prescriptive approach is one-dimensional and likely to lead to unforeseen negative impacts if implemented. A code based on a risk management approach would support better decision-making and techniques for estimating risks. It could be easily applied to simple and complex systems as well as helping, to identify possible controls, risk mitigation options and residual risk. Risk analysis provides an organised method of periodically upgrading the control of hazards of an operation, helping personnel understand the extended working hours hazards at their site and enabling them to identify new hazards. This analysis typically extends beyond simply understanding the hazards to controlling and reviewing them. The value of including the people exposed to the risk is well understood and even the case for extending the peer community with a wider group of stakeholders is important (e.g. amateur ornithologist's critical role in identifying DDT with falling populations of predators).

The proposed Working Hours Code should have the objectives of encouraging purposeful, targeted change, such as that already happening in the minerals industry. Industries and companies should be encouraged to develop and follow proper processes, rather than just complying with a regulation or prescriptive code of practice. The purpose of a prescriptive code may be universal application, but a code based on a risk management approach is arguably more likely to be successfully applied in the workplace. This is because it gives more opportunity for those directly involved in the work to think about their jobs (and their working hours) and to suggest improvements. Conversely, a prescriptive code may have a dampening effect on an organisation's motivation to seek on going improvements in working arrangements, and discourage employees from adopting safe work and lifestyle practices.

Prescriptive approaches are too blunt an instrument. A prescriptive code may be seen as providing the “answer”, based on the best available research. In fact, the research is mostly inconclusive. In some particular instances, a prescriptive requirement will just not make sense; more broadly, prescription can encourage companies to abandon purposeful change and merely comply with the letter of the law. This may have harmful economic and social effects (eg The Aubry Law in France¹⁸⁰ has reduced competitiveness of industry, reduced many individual’s earnings, restricted their ability to combine work and study and reduced the number of hours doctors work by 20%, creating longer waiting lists).

To paraphrase the truism, a risk management approach teaches the person how to fish, whereas a prescriptive code may give the person a fish in a particular instance. Risk management teaches a process, as compared to a prescriptive code which may give a solution at a point in time. A far more appropriate process is the application of a site based risk management approach leading to the development of a Fatigue Management Plan. This approach gives more effective results, allows situation-specific outcomes that are more sensible and more effective, and retains the ability of a site to undertake proper, strategic problem solving.

Such an approach does not have to be quantitatively rigorous to the nth degree, in a purist risk management sense. The widely recognised ThinkSafe SAM campaign is based on a simple yet effective premise. Something reasonably simple but focused specifically on working hours, backed by an effective awareness campaign, could be suitable for an across-industry code.

Naturally it could be supported in industries such as minerals by a more detailed industry fatigue management guideline, further supported by appropriate industry-based measures to facilitate on-the-ground implementation. However, in industries dominated by small businesses it could be more simply and widely applied than would a prescriptive code of practice which may be seen as bureaucratic and out-of-touch.

Enforcement of an industry-based guideline then becomes an issue principally for that industry, with WorkSafe taking an oversighting or quality assurance role. This proactive approach would reduce the imposition of the bureaucracy on the industry, and would be more effective and less resource-intensive for WorkSafe. Conversely, a prescriptive code could only be enforced by inspection campaigns and reactive, after-the-event investigations.

Although there may be a “comfort factor” in having a prescriptive code, the key yardstick should be an estimation of ultimate effect. In my view a risk management approach will ultimately be more effective, for the reasons expounded here.

¹⁸⁰ See Biliou (2002)

An approach that places limits on successive night shifts, work hours and related travel will not of itself alleviate fatigue problems. Prevention of fatigue is a multifactorial process having many causes and interacting factors with other activities and situations. Merely relying on prescriptive limits could minimise the consideration of other causal factors and development of risk modifiers, namely the type of work, environmental contributors, and health and lifestyle issues. In addition, a prescriptive code would be based on research which is still not definitive.

Recommendation 2 ignores the significant role of task demands and related workload as a determinant of employee fatigue, with an exclusive focus on "work hours". Mental workloads along with perceptual, attentional, affective or emotional demands are just as important as physical discomfort or tiredness when trying to minimise the errors individuals make as they become fatigued and to maximise the extent of recovery available.

On a longer-term basis, the effects of extended working hours on health require more research. Any research findings can then become input to a risk management approach. A prescriptive code of practice can not be based on a great deal of scientific knowledge of the longer term effects of extended working hours, because it does not exist. Likewise, a prescriptive code by itself is not helpful in uncovering any longer term consequences. The key is in targeted research.

There is a further issue with the relationship between a general code and an industry code of practice. If an industry code's terms are to be completely "consistent with" those in the general code, then this highlights the need for a general code to be high level, non-prescriptive and with a risk based methodology.

With regard to the specific parameters in Recommendation 2, I provide the following comments:

Length of Roster Cycle

I agree that there has to be an ultimate limit to the number of consecutive shifts worked. The impact of working consecutive night shifts is greater than day shifts. People working night shift tend to accumulate a sleep deficit due to decreased quality of sleep. If there is a change from nights to days there should be a break to allow readjustment (i.e. a 24 hour break.). However, shorter cycles of two to three days can entail more "shift changes" with the individual having to abruptly alter their sleep/ wake cycle, disrupting sleeping strategies decreasing the opportunity for adequate sleep. In addition, longer cycles can allow better physiological adaptation and planning in a social context with friends and family.

The type of shift schedule can play an important part in improving family and social life. Cycles based on 7-day rotations tend to fit in with society better. This is especially so when based around a weekend off. Longer cycles give longer leisure periods off which can compensate for the social disruption of time spent at work. However, this time off ideally should be spent performing family or leisure activities and recuperating from work. Working a second job on days off or performing strenuous activity does not allow the individual to recuperate or recover a sleep deficit. Regular rostering allows better organisation of private, family and social life and I agree that roster details should be given well in advance with maximum notice, recognising there is a need for flexibility for circumstances like operational emergencies etc.

Health status, fitness, domestic and social strategies, the sleep environment and task demands contribute in combinations which are not clearly understood by the research.

The parameters in Recommendation 2 are very specific and do not try to balance the benefits of long and short cycles. The full range of research into these issues is not sufficiently definitive to naturally lead to some of the numbers/limits selected. As a result, it is therefore somewhat risky to rely mainly on one piece of research (Folkard¹⁸¹), no matter how rigorous the research appears. Folkard's relative risk calculations do not appear accurate enough to derive prescriptive limits on night shift sequences. Much of the discrepancy may be due to the limited control over the numerous confounding factors such as the plethora of work tasks, working conditions and even subtle factors such as the availability of appropriate medical treatment and the skill/methodology used by the accident investigators. There is a general lack of longitudinal studies on injury and health impacts as well "research" on family and social life issues are not well understood and sketchy at best.

In addition there is a dearth of research into the impact of fly in / fly out (FIFO) working arrangements, calling into question the support for the specific limits for FIFO situations nominated for inclusion in the code of practice.

Timing of End of Night Shift and Split Shifts

I agree that very early start times in the morning of day shifts tend to result in sleep deficits because bed times are not generally much earlier and sleep quality can be less. Later start times minimise the disruption to partners and families. Later start times also tend to overlap with managers' working hours and other organisations, which facilitates communication.

Split shifts are becoming more common in the service industry especially with cleaners and in the food industry. In this situation the employee starts at an early hour, has a break during the day and finishes late. This can lead to broken sleep and increased rise of fatigue. Both these factors need to be assessed and managed, as do other irregular hour factors such as overtime and call outs.

¹⁸¹ Folkard (2003)

Return from Rest and Recreation to FIFO Operations

FIFO operations tend to have extended shift rosters due to the remoteness of the sites and due to economic considerations. Positive risk modifiers associated with FIFO include the reduced need for travelling time on a daily basis and the potential to provide ideal accommodation, meals and recreational facilities. Negative issues can include extended time away from family and friends, limited health care and potential for sleep deficit related to extended shift cycles, although this latter effect seems to be lessened by the above risk modifiers.

Start times for the first shift can be an issue. If an individual flies in to start a night shift they may have been awake for 24 hours at the end of the first shift. This leads to increased safety risk and begins a sleep deficit that may not be recovered.

Many workers will live distant from the airport. Driving home during the circadian nadirs, after a night shift and early afternoon can be an occupational risk, increasing the chance of falling asleep while driving home alone at the end of the roster. Travel time and the method of pickup from the airport or operation are two obvious risk factors to assess. Other issues such as flight times and delays complicate this issue. Once again, in these circumstances a proper risk assessment is the appropriate process to follow, which can then lead to a customised solution of risk modifiers, controls, system changes, etc. To settle on a catch-all prescriptive clause (eg a maximum of an 8 hour shift if the new roster commences in the afternoon) may not really address the issue and the concerns.

Rest Breaks

Rather than specifying rest breaks a more appropriate strategy is to put the focus on consulting with employees at the site over appropriate measures to counter fatigue. For example, in jobs requiring high concentration or repetitive physical work, a number of brief rest breaks may be necessary to decrease fatigue. This may include having micro rest breaks, rotating tasks, napping, performing simple stretching exercises, or 5-10 minutes breaks per hour to help decrease fatigue. This is often a function of the task, for example where loss of concentration may mean missing an alarm or trends on control systems.

Education and Training

The options available to organisations for education and training should be broad and not limited to "qualified trainers". Some studies suggest¹⁸² the need to be wary of the usefulness of education and counselling programs unless used in the context of a change to existing shift schedules, presumably drawing on the knowledge of the people exposed to the risk. A study by Televerket (Swedish Telecom)¹⁸³ broke their organisation into several groups and applied various road safety interventions to the unique groups. They found that the following approaches were more effective, from most to least: discussion groups, bonus or other incentives, driver skill training, safety campaigns. Discussion groups basically enabled the groups to reveal their own personal issues with driver safety, discuss them, break them into issues that could be solved in the short term (usually individual changes) and those that were longer term requiring organisational change.

Health Assessment Monitoring

Health assessment monitoring needs to be risk based rather than being "free for everyone working greater than 48 hours or regular night shift". There is a need to make sure that an individual from an at risk group is able to ask their treating practitioner what impact their medical condition or illness will have on their work and visa versa. This should be linked to the public awareness initiatives suggested in Recommendation 6. The following risks may help to highlight an individual's need for health assessment monitoring:

- Illness and some chronic medical conditions are related to increased fatigue. This can be related to the illness itself (anaemia or low blood count), to the lack of sleep due to the illness or due to the treatments for the illness.
- Most acute infective illnesses are associated with tiredness and poor concentration and energy to varying degrees. This is especially so with viral influenza and bacterial infections (pneumonia).
- Some respiratory and cardiovascular conditions can also affect physical endurance and fatigue (ischaemic heart disease, chronic airways disease).
- Endocrine disorders including thyroid and diabetes can impact on energy levels and fatigue.
- Psychological conditions can have a major impact on fatigue both directly related to the condition itself and to the drug treatment. It is important that an effective Drug and Alcohol policy and Fitness for Work policy is in place to help address these issues.

¹⁸² See Tepas (1993) cited in Folkard (2003) p17

¹⁸³ Gregersen, Brehmer and Moren (1999)

Conclusion

The prescriptive requirements in Recommendation 2 do not encourage industries or organisations to develop their own strategies but to rely on regulated limits. Risk assessment supports better decision-making. A vital component driving the State's improvement of health and safety has been the ability of the industry and individuals to accurately identify hazards. The exercise of hazard identification is a powerful discipline in its own right in drawing attention to areas of unacceptable risk through collaboration and open discussion. A proper site based risk assessment focuses on the human element where the combination of cultural, organisational, group, job and individual dimensions all contribute to the hazard.

Conversely, a prescriptive code may be seen as providing the answer, but the research is mostly inconclusive. In addition, as noted above, prescription can encourage companies to abandon purposeful change and merely comply with the letter of the law.

There is still no consensus concerning the overall risks associated with Extended Working Hours and there is a multi dimensional background to consider, further basic research needs to be progressed urgently.

Given that the greatest number of people exposed to the potential sleep deficit hazard are working in the mining, health and community, hospitality and transport industries they have a vested interest to self manage working hours.

This taskforce was established with the clear purpose of recommending ways to improve the safety of people working extended hours in WA. . However, my proposition is that a risk management based approach will have better safety and other outcomes, and that a prescriptive approach runs the risk of producing the negative social and economic outcomes seen from the imposition of the Aubry Law in France.

It is my clear view as a long standing occupational safety and health professional in the mining, steel, manufacturing industries and public sector that the prescriptive requirements recommended in the report will not deliver the best outcome.

David Todd

16 February 2004

Attachment IV: Rejoinder to the Dissenting Report of Mr David Todd

The dissenting report from Mr David Todd argues for an 'alternative' to the minimalist general parametric Code of Practice proposed to control the risks of extended working hours; namely the site based risk assessment approach. The committee gave the latter approach some thought and consideration but found the approach unsatisfactory for universal application across all industries. The reasons for adopting a parametric Code of Practice approach were as follows.

Long hours of work and shiftwork challenge the universal human biological need for sleep, the synchrony of alertness and sleepiness with the day:night cycle and the social needs of humans. These challenges occur in all industries where long hours and shiftwork are practiced. What is required here is guidance, based on the best research evidence, on the minimal requirements that permit these needs to be met. Good evidence from meta-analytic research, such as Folkard (2003), which synthesizes the findings of many of the best research studies, is available. An evidence-based parametric Code of Practice is therefore appropriate for dealing with these universal biological and social needs. An evidence-based Code is a risk assessment of the hazards of extended hours and shiftwork based on the best available research data.

By contrast site-specific risk assessment is best suited to preventing accidents and incidents arising from unique work practices and circumstances at specific sites. However, the former approach does not preclude conducting risk assessment for fatigue at specific sites over and above the platform of a general parametric Code of Practice as outlined in the preamble to Recommendation 1. This would be a step towards an industry fatigue prevention plan or Code. There is therefore a good prima facie case for a minimalist, general parametric Code on working hours. Other considerations are as follows.

A satisfactory site based risk assessment approach requires a rigorous methodology based on objective risks at that site drawn from historical accident/incident data collected over some time and from as large a sample as possible. It is unlikely that these data exist for most industries, especially small businesses. It is possible that risk may change over time as work practices change. It is also unlikely that most industries would have the resources available to conduct rigorous site based risk assessments. It is also problematic as to where risk assessments should be conducted. What is the unit for a risk assessment? How small could a site be to justify a risk assessment? Potentially there is infinitude of sites to assess with attendant resource requirements to enforce the process.

Accidents and incidents are relatively rare and, some would argue, random events where hazards conspire to increase risk. This means a risk assessment needs to be based on as large a sample of data as possible in order to be truly representative of risk. Most businesses are quite small and thus the site based risk assessment they would conduct is likely to be quite misleading in comparison to one representative of as large a data set as possible.

Humans are very poor at estimating the probability of a hazard; witness the seriousness with which they take the risks of air travel compared to the much riskier car travel. There are many sources of bias which distort humans' estimates of the probability of a hazard; not least of which is simply the lack of statistics to estimate the probability of a hazard. Accurate estimates of risk are therefore quite hard to develop especially for specific sites and circumstances.

It is uncertain how a site based risk assessment program could be enforced to control a hazard but it would certainly be very costly and bureaucratic. Would the enforcement be limited to a requirement to conduct the site based risk assessment? How would the validity of the assessment be known unless the enforcer checked the data and methodology used to conduct the assessment? Any disagreement on risk between the enforcer and client would be likely to lead to much bureaucratic wrangling.

The most effective way of controlling the risk of a hazard is to minimize exposure to the hazard, especially if it is a hazard to health. The health risks of extended working hours and shift work are only emerging but nevertheless are very real. The most effective control measure is to limit exposure to the hazards themselves since the mitigating factors to sleepiness and circadian disruption are not well established, apart from night time sleep itself. A risk assessment process aims to reveal the immediate risk of accident resulting from working extended hours or shiftwork and is not suited to revealing the long-term consequences for health of these work practices.

Conclusions

A parametric Code of Practice was considered to avoid the pitfalls of the site-specific risk assessment approach for the following reasons:

- The risks to health of extended work hours and shiftwork are likely to be similar in most industries with these practices, although the consequences for safety, unlike health, may differ between industries.
- A parametric Code of Practice can target the general causes of the hazard in an economical and specific way. It can be founded on the most extensive data available and thus avoid the biases inherent in estimating risk in small data sets.
- A parametric Code can set specific targets, which are readily enforceable without the problems of differing estimates of risk inherent in the risk assessment approach.
- A parametric Code of Practice does not require extensive resources and demanding methodology that is required by risk assessment and is thus more suitable for all industries.

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- There is usually considerable variation between judges on how risky a situation is making risk assessment a less than definitive process. A parametric Code of Practice overcomes this complicating variability.
- A general parametric Code can coexist with industry specific fatigue prevention plans or Codes of Practice.

A/Professor Laurence Hartley
Chair, Extended Working Hours Review Panel

Attachment V: Dissenting Report of Ms Helen Creed

The potential and multiple occupational, health and safety concerns related to extended working hours on and for individuals, families, workplaces and communities is acknowledged. However, it is unrealistic to believe that a Code of Practice under the *Occupational Safety and Health Act 1984* would affect the extended working hours of all Western Australian employees. Extended working hours is an issue of the conditions employees work under and how their work impacts upon the rest of their lives.

Based on the submissions both written and oral to the Review into Extended Working Hours, a more appropriate means of effectively regulating working hours is through an industrial framework. To focus on occupational health and safety fails to recognise the broader public policy concerns related to extended working hours, particularly the effects of such hours on families and communities. An occupational safety and health approach excludes such matters and cannot operate to monitor and regulate the effects of extended hours on the community generally.

The effectiveness of the proposed Working Hours Code in addressing the potential detrimental effects of extended or excessive working hours is dependent upon several factors, including the following:

- Strong peak body that seeks to comply with the provisions of the proposed Code and has the willingness and capacity to ensure its members do so also.
- Union membership of workplaces
- Employee participation in OSH matters including an OSH delegate
- High proportion of permanent full time employees, rather than high proportions of part time and casual employees or those working non standard shift arrangements.
- Workplace culture of compliance in occupational safety and health standards

Many West Australian workplaces do not share the above characteristics. Furthermore, as recent studies such as The Griffith Time Project explicitly note, a regulatory framework is necessary because employers largely drive working hours, and financial constraints on overtime and penalty rates are not sufficient to independently address extended working hours. As has been acknowledged, in terms of labour costs, it is more cost-effective to rely on overtime on either a needs or regular basis rather than employ an additional worker. This has in the past decade contributed to both work intensification as well as excessive working hours, including unpaid overtime.

To the extent that the enforcement mechanisms on the Code are constrained, it is unlikely that the Code will address workplace cultures that value “presenteeism” and occupations where consistently working excessive hours is viewed as professionalism. The enforcement of any regulations around working hours will be necessary to realistically effect changes in workplace behaviour. The incentives for business to comply with a Code of Practice will often not outweigh the benefits of non-compliance. Furthermore, the entrenchment in many workplaces of a culture of extended hours means that anything less than enforceable standards will not have the desired effect of reducing the risks and adverse consequences of extended hours. Prosecutions for breaches of OHS laws are rare.

In addition the encouragement of industry specific codes consistent with the principles of the Working Hours Code means that the specific issues relating to working time at an industry level are left to self-regulation. Self-regulation of OHS at an industry level has been shown to be inadequate. An industrial approach that provides for the development of enforceable standards is the best means of developing a comprehensive, workable and effective means of regulating extended working hours, and one that is relevant to the particular industry. Many of the submissions to the Review that indicated extended working hours were a problem referred to industries where industrial relations have been de-regulated.

Notwithstanding these observations about the limitations of the proposed Working Hours Code, and my recommended alternative, I note that an amendment to the *Minimum Conditions of Employment Act 1993* that expressly provided the maximum hours that may be worked during the course of a day, week, quarter or year would have the effect of both strengthening the Code and rendering coverage of a far greater proportion of employees in Western Australia.

Such an approach recognises that the nature of the employee/employer relationship is intrinsically one of power, and within this equation the relative ability of employees to negotiate terms and conditions of employment, including remunerations are dependent upon their value in the labour market.

The span and distribution of hours worked – working time arrangements - is a fundamental element of the terms and conditions of employment. Rates of remuneration are generally linked to the span and distribution of working hours. In Australia as in other jurisdictions, working hours across industry have been negotiated, contested and arbitrated within the industrial arena, and indeed the inclusion of maximum hours whether in awards, enterprise agreements or in legislation explicitly recognises the pivotal role and value ascribed to “time”.

The recent decision of the Australian Industrial Relations Commission is unequivocal – extended working hours have adverse effects on workers, their families and communities. The factors to be considered as reflected in the Test Case included risks to an employee’s health and safety as well as an employee’s personal circumstances and the needs of the workplace or enterprise. An industrial framework for the regulation of working hours is not limited to the focus on occupational safety and health risks but can consider the breadth of the affect of such hours. Exclusion of an industrial component has in my view weakened the proposed approach.

Helen Creed

12 February 2004

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