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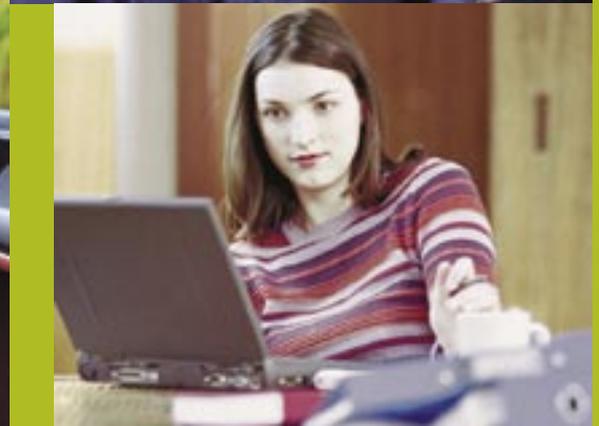
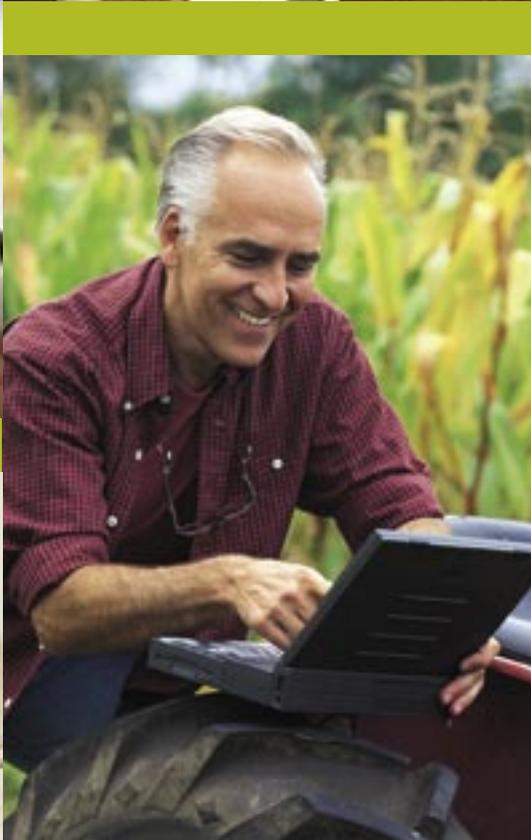
Department of Communications,  
Information Technology and the Arts

Department of Employment and  
Workplace Relations

Report of the Australian Telework Advisory Committee to the Australian Government

# Telework for Australian Employees and Businesses

**Maximising the economic and social benefits of flexible working practices**



# **Telework for Australian Employees and Businesses: Maximising the Economic and Social Benefits of Flexible Working Practices**

REPORT OF THE AUSTRALIAN TELEWORK ADVISORY  
COMMITTEE TO THE AUSTRALIAN GOVERNMENT

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### Foreword

The Australian Telework Advisory Committee (ATAC) was established in March 2005 to provide advice to Government on a range of issues relating to telework in Australia. In addressing these issues, ATAC has consulted widely with stakeholders and the public and has developed recommendations to assist the Australian Government in its consideration of the development of telework opportunities for Australian workers and businesses.

The major theme to emerge from ATAC's considerations is that, as a flexible working arrangement, telework has great potential to assist communities, government, employers and employees meet a number of economic, social and personal goals. Where telework is enabled by appropriate information technology and sensible work practices, it can allow employers and employees to work without the traditional constraints of location and time and can support new and innovative workplace arrangements.

This report identifies opportunities for telework to contribute to broader social and economic goals identified by the Australian Government as areas of policy priority. For example, evidence suggests that telework can lead to productivity gains at a firm and macro-economic level. Telework can play an important role in strategies to address the ageing of the workforce and skill shortages in certain industries, as well as the economic revitalisation of rural and regional areas. Telework can facilitate greater workforce participation consistent with the Government's Welfare to Work policies, especially among groups that find it difficult to participate in the traditional office-based workplace—such as people with disabilities and carers.

Telework can also encourage greater community development and reduce the environmental impact of traffic congestion and vehicular emissions. It also offers the opportunity for greater continuity of essential services and government and business functions in the event of natural or human disasters.

Telework also has the capacity to assist employees improve their work–life balance and reconcile their work and family responsibilities by saving time travelling to and from work and providing greater flexibility in working hours and arrangements. It can also be an effective tool for older workers who are making the transition to retirement by, for example, reducing their working hours and working away from the office several days per week.

The report concludes that while there are employees and businesses across Australia already undertaking telework through individual and collective agreements at the workplace level, there are a number of organisations that have either never considered telework as an option or are struggling with its introduction and implementation. This report therefore identifies opportunities for action to increase the uptake and spread of telework across Australian workplaces and maximise its potential benefits for Australian businesses, workers and communities.

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## Australian Telework Advisory Committee—Key Findings

- Telework is a flexible working arrangement that has great potential to meet a number of economic, commercial, social and personal objectives. There are numerous employees and businesses across Australia already undertaking telework through a variety of formal and informal agreements that are tailored to their particular circumstances. However, despite research that demonstrates teleworkers can be up to 40 per cent more productive than workers located in traditional office environments, many workers and businesses are still reluctant to utilise these arrangements effectively.
- Telework is not an option for all occupations and industries. However for some sectors, appropriately implemented, telework offers the potential to deliver important outcomes: enhanced business practices; improved financial viability through increases in productivity; reduction in certain operating costs (such as real estate, parking and travel); and a greater capacity to attract and retain quality staff (especially in tight labour markets). Workers will benefit from improvements in their work–life balance and an enhanced ability to reconcile their work and family responsibilities by saving time travelling to and from work and providing greater flexibility in working hours.
- At the commencement of this review, the Australian Telework Advisory Committee expected the impediments to increased uptake of this flexible work practice would be ICT-related. Rather, we found that the impediments are attitudinal, educational and management related. Managers would benefit from enhanced training on the commercial, social and environmental benefits that can flow from work practices—such as teleworking—that are supportive of society’s changing values and practices.
- Telework offers the potential to: remove the traditional constraints of location and time; create possibilities for new and innovative working arrangements; satisfy changing expectations of many younger workers seeking increasingly flexible lifestyles; and facilitate greater workforce participation consistent with the Government’s Welfare to Work policies—especially among groups that find it difficult to participate in the traditional workforce such as people with disabilities, mature age workers, carers and workers in rural and regional areas.
- The Australian Government, as a policy priority, places great importance on the need to support strategies which address the ageing of the workforce and skill shortages in certain industries as well as the economic revitalisation of rural and regional areas. In addition to partially meeting these needs, increased uptake of telework opportunities will encourage greater regional development and renewal, and reduce the environmental impact of traffic congestion and vehicle emissions.
- Strong leaders, skilled at implementing change and cognisant of the potential gains delivered by telework, are needed to champion a work practice that is likely, in some sectors, to be a key characteristic of the workforce of the future. The Australian Public Service is well placed to take a lead role in promoting telework and quantifying productivity benefits for the Australia economy.

### **Executive Summary**

The Australian Government established the Australian Telework Advisory Committee (ATAC or the Committee) in March 2005, to provide strategic and independent advice on the development of telework opportunities for Australian workers and businesses.

ATAC was asked to prepare advice for Government on a range of issues relating to telework in Australia, including emerging telework trends in the public and private sectors, and outcomes that would flow from the accelerated uptake of telework. ATAC was also asked to provide advice on issues affecting adoption, including cultural, technical and regulatory drivers and impediments, and to develop recommendations designed to promote the effective adoption of telework arrangements.

#### ***Definition of Telework***

During the course of the review, ATAC identified a wide range of telework definitions. Rather than striving for consistency in definition as a primary goal, the Committee concluded that it would be more useful to look at telework as one of the many social and workplace trends which are being accelerated by advances in Information and Communications Technology (ICT). ATAC concludes that the important issue is the trend itself, which in this case is essentially a breaking of the traditional nexus between paid work and a particular physical location in which the work is performed.

In the context of the review, ATAC adopted a working definition of telework to include work undertaken, either on a full-time, part-time or occasional basis, by an employee or self-employed person, which is performed away from the traditional office environment, including from home, and which is enabled by ICT, such as mobile telephony or the Internet.

#### ***The Public Interest in Telework***

ATAC explored the various ways in which the teleworking trend is affecting employees, employers and governments. ATAC critically examined how the teleworking trend is impacting workplace participants, and in light of this analysis, considered whether the trend should be encouraged or discouraged.

ATAC recognises that telework can be more suitable for certain job types, such as professional, administrative and knowledge-based workers, than others and that these arrangements are only likely to be utilised by workers whose skills and job descriptions are aligned with the needs of the employer and business.

Nevertheless, ATAC concluded that broader uptake of telework could lead to a range of important public benefits. Of particular significance is the capacity of telework to realise business efficiencies and cost savings. There is evidence to suggest that teleworkers can perform more work per hour than their office based colleagues do. In addition, ICT-enabled flexible working can reduce operating expenses, including travel and real-estate

costs. Telework can also expand the labour market during a period of low unemployment and skill shortages, by providing improved employment opportunities to people who may otherwise be excluded from the workforce, including mature aged workers, workers in rural areas, carers and disabled workers.

ATAC also identified additional community benefits arising from increased telework adoption. For example, ATAC recognises that telework could benefit remote and drought ravaged areas of Australia by providing new employment prospects for workers, and supporting new business and export opportunities for rural industry. Telework also has environmental appeal, and could be used to reduce traffic and carbon-based emissions, and slow the effects of global warming. Telework can also be used to support government and business continuity in the advent of natural disasters, terrorism or epidemic. ATAC also notes that telework can provide a better work–life balance for Australian workers, and allow more flexibility for parenting, family and caring responsibilities.

### *ATAC Research Findings*

Owing to the lack of a consistent definition of telework, it is difficult to assemble authoritative data when measuring the uptake of telework across industry sectors and between countries. Notwithstanding the difficulties in compiling comparable statistics, there is a surprising level of consistency in the conclusions of researchers who have studied telework, including the capacity of these arrangements to support business productivity and efficiency improvements, and their ability to broaden workforce participation.

To better inform the understanding of ATAC members in relation to the status of telework in Australia, the Australian company Sensis was commissioned to undertake research into Australian telework adoption and usage trends. These survey results, which utilise a very broad definition of telework, suggested that telework uptake in Australia is significant, particularly among small to medium enterprises (SMEs), than previously believed. Survey results indicated that 34 per cent of SMEs, and 30 per cent of all workers, telework. However, the majority of telework arrangements currently occur on an infrequent and informal basis.

The survey found that 20 per cent of employers who utilise teleworking arrangements, and 24 per cent of teleworking employees, identified productivity gains as an important factor driving their uptake of telework arrangements, and 73 per cent of businesses and 62 per cent of workers reported a high level of satisfaction associated with their telework arrangements. The role of productivity in driving telework uptake was a consistent message of the ATAC public consultations, and is strongly supported by feedback from Australian and international experts on telework.

### *ATAC Consultations*

Consultation with the public was an important component of the ATAC telework review. To inform its understanding of telework issues, ATAC called for public submissions, provided consultative forums for key stakeholders, and met with state and territory government agencies, as well as some private sector organisations, to discuss their telework experiences. An overview of Stakeholder Consultations is at Attachment B. The public consultation process provided a clearer understanding of telework adoption drivers and barriers.

Consultations indicated that for employers telework uptake is being driven by productivity benefits and cost saving opportunities, and is used as an incentive to recruit and retain staff. Employees see telework as a way to improve their work–life balance and increase the flexibility they have available for family responsibilities. Consultations suggest that ICT, including mobile telephony, broadband Internet, and collaborative applications, are all supporting the capacity of workers to undertake home-based and remote work.

ATAC consultations suggested that further uptake of telework in Australia is being prevented by a range of barriers. These include ingrained resistance and mistrust from within some workplaces, a lack of access to broadband and appropriate ICT, and an inadequate understanding of regulatory aspects, including Occupational Health and Safety (OH&S) and workers compensation implications. Developing strategies to overcome these growth impediments has been a major focus of the review, and are reflected in the list of recommendations to Government.

### *Target Groups*

ATAC recommendations focus on maximising the benefits of telework, including to large firms, SMEs, home-based workers, and the self-employed. ATAC also recognises that Government can best affect those sectors of the labour market where it is a substantial participant. The Australian Public Service (APS) is therefore also an area of focus in the list of recommendations to Government.

In addition to mainstream industry, ATAC recommendations are designed to maximise telework opportunities for a range of key target groups, including rural workers, carers, workers with disabilities, and mature aged workers. These groups were identified through the public consultation process, including through consultation with industry and all tiers of government, as being segments of the workforce that were particularly likely to benefit from growth of telework in Australia.

### *ATAC Policy Recommendations*

In the context of the telework review, ATAC considered the key policy issue to be whether or not Government should encourage or maintain the status quo. As such, the fundamental recommendation of this report is that Government should encourage the

growth of telework, in order to further enable associated benefits to business, government and the community. ATAC has developed six proposed actions designed to realise these objectives. These are discussed in greater detail in chapter 4: ATAC Policy Recommendations.

**1. Management Training:** Evidence suggests that successful telework adoption is being impeded by the inability of many managers to design, implement and supervise ICT-enabled remote working arrangements effectively. To remedy this, the Committee recommends that Government support the development and promotion of telework training programs for managers in the private and public sectors who supervise teleworking employees. To support this recommendation the Government should:

- Undertake research to identify gaps in the provision of training courses and learning modules for managers of telework arrangements;
- Discuss with telework and education and training sector stakeholders options related to the inclusion of telework modules in mainstream management training curricula, including through the development and provision of online telework training modules, to ensure greater access to training resources for managers of teleworkers, including those located in isolated and remote areas.

**2. Building Technological Capacity:** During recent years ICT has driven economic growth and streamlined business efficiencies. Clearly, ICT is also a critical enabler of flexible working, and ATAC recommends that Government support the capacity of ICT-enabled workers in all areas of Australia to reap the economic and social benefits of telework, through continued investment in the availability and effective use of teleworking ICT resources. To support this recommendation:

- The Australian Government should support investment in the effective use of technology, including through the dissemination of ICT better practice information;
- The Australian Government should include the oversight of national telework policy issues in the watching brief of the National Broadband Strategy Implementation Group;
- The Australian Government should encourage the use of assistive technologies for people with disabilities, including by promoting the applicability of the Government's Workplace Modification Scheme to teleworkers; and
- All levels of government should continue to fund initiatives which support the development of higher-speed and next generation network connectivity, including in regional, rural and remote areas.

**3. Telework Online Resource Centre:** Various organisations in the private and public sectors have developed telework better practice information and online toolkits. However, currently there is no centralised repository of available information and resources. ATAC recommends that Government support the development and maintenance of a telework web portal, to enable better access to telework information and

better practice strategies by businesses and workers. To support this recommendation Government should:

- Undertake consultation with telework stakeholder organisations, including education and training providers, government agencies, telework exemplar organisations, and bodies representing key target groups, to identify and catalogue existing online telework materials; and
- Develop and maintain a Telework Online Resource Centre, containing better practice case-studies and implementation guides, ICT and OH&S checklists, information on assistive technologies, support tools for target groups, user forums, and other relevant information and links.

**4. Promote and Support Telework In the APS:** Statistical data suggests that the APS is an early adopter of telework. ATAC also recognises that there are further opportunities for Government to improve public-sector productivity and workforce participation, while also meeting the expectations and career preferences of its APS workforce through more flexible employment arrangements and conditions. Consequently, ATAC recommends that Government promote and support telework in the APS as part of its commitment to a more flexible and 'family-friendly' APS workforce, and as potential 'teleworking role-model'. To support this recommendation the Government should:

- Develop better practice teleworking guidelines for the APS workforce;
- Obtain commitments from APS senior executive to support teleworking implementations and support changes to work culture; and
- Fund public-sector telework trials, with a view to exploring the potential benefits of longer-term telework programs, including in remote areas.

**5. Research and Modelling:** Appropriate data and improved economic modelling on the use and impact of work will equip Government to assess the need for further action. ATAC research indicates a clear lack of recent data on telework adoption and usage trends in Australia. To remedy this ATAC recommends that Government fund surveys of businesses and employees to establish longitudinal telework data, and support economic modelling to clarify the ways in which telework can support improved business productivity and cost savings. To support this recommendation Government should:

- Fund telework questions in the 2006 and 2007 Sensis SME and consumer surveys;
- Provide a snapshot of telework in the APS by including telework related questions in the annual Australian Public Service Commission *State of the Service* survey;
- Support cost-benefit analyses into the impacts of telework at a firm level; and
- Support economic modelling into the benefits of telework at a sectoral and macro-economic level.

**6. Promoting Benefits of Telework and Telework Better Practice:** Evidence suggests

that a lack of awareness within the workforce and business community relating to the benefits of telework and to telework better practice is limiting its effective use and further uptake. To assist this situation ATAC recommends that Government support an awareness raising and education campaign to promote the benefits of telework. To support this recommendation the Government should:

- Prepare and distribute telework case studies and better practice information, including in relation to the rights and obligations of employees and employers engaged in teleworking activity;
- Support seminars, conferences, training sessions and road show activities to promote telework benefits and better practice, including to the mainstream business community, SMEs, and identified target groups, such as potential employers of mature aged workers, workers in rural and regional areas, carers and disabled workers; and
- Identify and liaise with relevant stakeholder networks, including in regional and rural Australia, and identified target groups, to support the targeted dissemination of promotional information.

## Chapter 1: Background

### 1.1: Formation of ATAC

The Australian Telework Advisory Committee was established as a response to a commitment by the Australian Government to establish a telework and home-based business taskforce consisting of government agencies, industry and small business representatives to advise on options and impediments to the development of telework for employees and businesses<sup>1</sup>.

ATAC represents an important step towards a nationally coordinated approach to the development of telework policy in Australia, and represents an opportunity for the Government and private sector to share experiences and consider strategies to maximise the opportunities and benefits provided by telework. A list of ATAC members and representative organisations has been included at [Attachment A](#).

The ATAC review has been undertaken alongside other related policy development processes, including the Parliamentary Inquiry into Balancing Work and Family, the National Broadband Strategy, and the Australian Government's ICT to Support Flexible Work Practices Inter-Departmental Committee.

The ATAC Terms-of-Reference included the development of advice on a range of issues including:

- a) The current status of telework in Australia and overseas;
- b) Emerging telework trends in both the public and private sectors;
- c) Outcomes that would flow from an accelerated uptake of telework arrangements in the Australian workforce, including analysis of social and/or economic costs and benefits, and providing quantitative analysis where possible;
- d) The range of issues affecting telework take-up, including cultural, technical, regulatory and others drivers and impediments; and
- e) Recommendations designed to promote the effective adoption of telework arrangements, including through the development of market-based strategies.

#### *ATAC Consultative Process*

Consultation with the public has been a key component of the telework review. To better inform its views and deliberations ATAC organised public consultative forums to which key stakeholders were invited, called for public submissions, and met with state and territory government agencies and private-sector organisations to discuss their telework experiences.

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<sup>1</sup> The Howard Government, Election 2004 Policy, Information Technology: Connecting an Innovative Australia, p.10. See: [www.liberal.org.au/2004\\_policy/Sept19\\_Information\\_Technology\\_final.pdf](http://www.liberal.org.au/2004_policy/Sept19_Information_Technology_final.pdf)

Newspaper advertisements promoting the ATAC consultative process were placed in The Weekend Australian and the Sydney Morning Herald, on 16 April 2005, in the Hobart Mercury, NT News, Gold Coast Bulletin, Ballarat Courier, Sunshine Coast Daily, Newcastle Herald, Lismore Northern Star and Illawarra Mercury on 23 April, and in the Longreach Leader on 29 April.

ATAC public consultations pages, including relevant background papers, the Committee's membership lists and terms of reference, were placed on the Department of Communications, Information Technology and the Arts (DCITA), and the Department of Employment and Workplace Relations (DEWR) websites in early April 2005. The ATAC secretariat established a dedicated 1800 'hotline' and email address (telework@dcita.gov.au) to respond to queries from the public.

The telework review was also promoted via targeted e-mail to a large number and wide range of prospective stakeholders, including in state and territory agencies, municipal councils, industry groups, trade-unions, academics and community associations.

### 1.2: What is Telework?

Telework can take many forms, however, most definitions refer to telework as a form of flexible-working, which is enabled by ICT, and undertaken outside of a traditional office environment. The Internet Industry Association (IIA) has identified four main types of telework<sup>2</sup>. These include:

- *Home-based employed teleworkers*, who work full-time from home using some form of telecommunications technology, or who telework part-time, either on set days and times or on a more ad-hoc basis;
- *Home-based self-employed teleworkers*, including contractors and the self-employed, who normally work from home using some form of telecommunications technology;
- *Mobile teleworkers*, who spend at least 10 hours per week working away from their main place of work (either their home or their employees workplace), using some form of telecommunications technology; and
- *Day extenders*, who work full time from their employer's workplace, but occasionally work from home, typically after work or on weekends.

Teleworkers therefore potentially exist in a wide variety of contexts, ranging from a public sector database manager who uses dial-up narrowband Internet to link to the office while nursing a sick child, to a neurosurgeon based in Berlin training students in Perth using virtual imagery applications through a broadband network connection.

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<sup>2</sup> The IIA definition was adapted from SUSTEL (Sustainable Teleworking) project, final report (2004) 'Is Teleworking Sustainable? – An Analysis of its Economic, Environmental and Social Impacts', [www.sustel.org](http://www.sustel.org) and the SIBIS (Statistical Indicators Benchmarking the Information Society) project (2001), 'Work package 1: eEurope Benchmarking Framework Definitions: Task 1.1) [www.sibis.org](http://www.sibis.org)

In terms of a working definition for the purposes of the telework review, ATAC has defined telework as:

- work located away from the traditional central office, including from home, a remote location or from no fixed location (mobile);
- enabled by ICT, such as a personal computer (PC) and network connectivity;
- occurring within the context of the Australian economy (eg. not ‘off-shoring’ or ‘time-shifting’ arrangements);
- involving full-time, part-time or casual work;
- either through formal or informal arrangements; and
- voluntary or compulsory.

This typology broadly encompasses the four main types of teleworkers outlined above, and establishes the Government’s desired focus on telework as an enabler of economic growth, workforce participation and better work–life balance for Australian workers.

### 1.3: Home-based Businesses

While most of the discussion in relation to telework in this report applies to employees, rather than the self-employed, it is clear that home-based businesses are of increasing importance to the Australian economy. As at June 2004, around 1 million people operated a small business from home, accounting for 67 per cent of all small business operators. This is an increase from 765 000 operators in February 1997, which represented 55 per cent of all small business operators<sup>3</sup>.

Most home-based businesses are run by men, with 70.7 per cent of all home-based business operators being male. The proportion of female operators has remained fairly stable over the last couple of years at around 30 per cent. At June 2004, 68.2 per cent of home-based businesses were using computers in their business operations, compared to 71.7 per cent for all small businesses. The majority of these home-based businesses (86.2 per cent), had access to the Internet. The most common use of the Internet by home-based businesses was for email and other purposes. Use of the Internet for all purposes has increased, particularly for ‘making or receiving payments’<sup>4</sup>.

Many small business operators already recognise the benefits of working from home, such as lower overheads and set up costs, and greater independence and control over business operations. However, there are a number of issues that face home-based businesses that teleworkers working for a larger organisation would not face—including insurance and liability costs, greater career isolation, access to sophisticated ICT facilities and high-speed connectivity, and lack of professional, ICT and corporate support.

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<sup>3</sup> Australian Bureau of Statistics, *Characteristics of Small Business*, 1997 and 2004, Cat. No. 8127.0

<sup>4</sup> Australian Bureau of Statistics, *Characteristics of Small Business*, 1997 and 2004, Cat. No. 8127.0

Given the different regulations around home-based businesses, there are also a number of other issues specific to self-employed workers which need to be factored in when considering the benefits and costs of setting up a telework or home-based business arrangements. For example, tax regulations differ depending on whether the home is treated as a principal place of work, or if work is undertaken within a specific area within the home.

### 1.4: Why is Telework Important?

There are a number of benefits of telework which the Committee has identified. These are:

- Business productivity and cost savings;
- Improved flexibility and work–life balance;
- Increased workforce participation;
- Reduced environmental impacts; and
- Government and business continuity.

Business productivity and cost savings can be realised by providing flexible telework arrangements which improve worker productivity, efficiency and organisational effectiveness and reduce staff turnover and absenteeism. These benefits can only be fully realised if teleworking opportunities are enabled and supported by managers and employees alike to suit their individual and organisational needs. Efficiencies can also be achieved through reduction in travel costs and office space, although this needs to be balanced against additional investment in human resource support, ICT equipment and support, and other facilities. For many organisations that have established a business case and invested in telework, the benefits outweigh the costs.

Telework can allow for greater flexibility for employees, including better work–life balance. This is seen as increasingly desirable among older workers (including retirees) and younger workers (e.g. Generation Y), workers with caring responsibilities and workers with disabilities. Teleworking allows workers to reduce travelling times and costs, spend more time with family or caring commitments, and is likely to be attractive to certain groups in the labour force due to their family or personal circumstances or location. While telework is not likely to be a complete solution for those undertaking regular caring responsibilities, and other support services are also likely to be required, it does seem that ICT-enabled working arrangements potentially provide workers with an increased capacity to care for dependents, while also undertaking paid work from their home environment.

Telework is also seen as an attractive working arrangement among employees generally, as greater flexibility of working hours and location of work can be used to meet the changing needs of people throughout their lives. Given the increasing diversity of the

workforce, skill shortages in certain sectors of the economy and the ageing of the population, the demand for flexible work will remain an important consideration for government, business and the community.

Increased workforce participation can be facilitated by greater flexible work opportunities, such as teleworking. These groups include mature age workers, workers with caring responsibilities, workers with disabilities, and workers in regional and rural areas. For workers in regional and rural areas, enabling employment through telework has positive spin-off effects on rural communities particularly in times of drought which is an added incentive to support telework in this sector.

There are environmental benefits from increased telework through reduced traffic congestion and carbon emissions. Time wasted in traffic jams can represent a significant loss to the economy, as evidenced by a United Kingdom (UK) report in 2000 which estimated the net public loss to the UK economy at £20 billion (AUD\$47 billion)<sup>5</sup>. Reduced carbon emissions will assist to address air quality and improved quality of life particularly in dense metropolitan areas.

Government and business continuity is enhanced by telework. This benefit has achieved particular prominence during 2005, with the disruption created by actual and potential catastrophes, including Hurricane Katrina in the United States (US), and the anticipated global Bird Flu epidemic. During human and natural disasters, the ability to work in a decentralised manner, away from central business locations, allows businesses and government to provide ongoing services.

ATAC recognises that all of these drivers present a strong case for government action in support of telework. Given the significant potential telework has for individuals, businesses, communities and the economy, strategies to make telework easier to implement and more effective are likely to be significant benefit to Australia.

### **1.5: Barriers to Telework Uptake**

ATAC consultation indicated that there are a range of factors which may impede the adoption of telework by Australian businesses and employees. Barriers for employers include:

- job design and nature of the work;
- organisational or cultural resistance;
- lack of manager awareness or capability;
- perceptions of cost, including OH&S costs and ICT equipment;
- perceptions of regulatory restrictions; and

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<sup>5</sup> Flexibility Ltd. (2000), *Telecommuting 2000: The Costs of Congestion and Commuting*, [www.flexibility.co.uk/telecommuting2000/tc2002.htm](http://www.flexibility.co.uk/telecommuting2000/tc2002.htm)

- security and privacy issues.

From an employee's point of view, barriers include:

- perception of or lack of management support;
- cultural barriers;
- overwork—extension of work into the home; and
- isolation, leading to lower opportunities for advancement and reduced social interaction with co-workers.

Many of these barriers can be addressed by a combination of better information provision on rights and responsibilities and better practice guidelines, management training, and more effective ICT use and support. These barriers and possible responses to them will be elucidated in more detail in the following chapters of this report.

## Chapter 2: Workplace Flexibility

ATAC has concluded that increased Australian telework uptake has the potential to advance Government's policy objective of encouraging higher workforce participation. It will complement a range of current initiatives including Australian Government strategies for older workers, Welfare to Work reforms, and the new Work Choices system which has been designed to promote greater flexibility in workplace agreement-making.

While reliable ICT, in particular access to reliable and responsive bandwidth connectivity, was initially expected to be the key stumbling block for the introduction of telework, ATAC found that workplace issues, such as management practices and workplace culture, were raised as much more important factors during the stakeholder consultations. These issues were raised by both employers and employees.

While it is clear that there are many potential benefits to introducing telework opportunities in a workplace, such as the potential increase in productivity and the enhancement to work-life balance of employees, there are also factors which are currently preventing greater take up of telework. Workplace obstacles, both real and perceived, can inhibit an organisation's capacity or willingness to consider telework. Obstacles commonly cited in the consultations included the fear of OH&S regulations and costs, the nature of the job (job design), award restrictions, perceived and actual difficulties in managing teleworkers and cultural resistance within the organisation.

Given the Australian Government's aim to encourage higher workforce participation through its strategies for older workers, Welfare to Work reforms, and the Government's new Work Choices system to promote greater flexibility in workplaces through agreement making, enabling and supporting telework will assist in meeting these objectives.

### 2.1: Drivers for Workplace Flexibility

With the changing nature of the Australian labour force and greater demand for flexible working arrangements, it is clear that organisations that embrace change will be best placed to succeed. Some of the drivers for greater workplace flexibility are increased productivity, better work-life balance for employees, and greater opportunities for employment for mature age workers, carers, people in regional and rural areas and people with disabilities.

ATAC was interested in exploring who benefits from teleworking and what issues particular groups of people have with regard to telework. ATAC considers that telework is of potential benefit to many workers, given the enhanced opportunities for a better balance between work and non-work commitments, reduced travel times and flexibility in managing work. Telework can be of particular benefit to carers, mature age workers, people in regional and rural areas and people with disabilities, who are more likely to require flexible working arrangements to enable their participation in the paid workforce.

### Business Productivity and Cost Savings

Research and evidence gained during the ATAC consultation process suggests that telework can increase worker productivity, save costs and reduce operating expenses. For example, the *Sensis Insights Teleworking Report* found that 20 per cent of employers and 24 per cent of workers identified productivity gains as an important factor driving their uptake of telework arrangements<sup>6</sup>.

Some employers see telework as a way to maximise worker productivity, and there is evidence to suggest that some teleworkers perform more work per hour than their office-based colleagues. For example, the New South Wales Roads and Traffic Authority (NSW RTA) found that projects undertaken by teleworkers cost 30 per cent less, were 35 per cent better in quality, and took 69 per cent less time, than those undertaken by staff working in central office locations<sup>7</sup>.

The potential for telework to reduce operating expenses, including travelling and real-estate costs, is an adoption driver identified by business. Since 1998 the US telecommunications company AT&T has halved its office space costs through telework, saving the organisation US\$500 million<sup>8</sup> (AUD\$680 million). However, it should be noted that savings need to be measured relative to the establishment costs and maintenance outlays of a telework program, and many businesses consulted by ATAC emphasised that teleworkers require office equipment, suitable consultancy applications, and support, including for ICT and OH&S, to do their job effectively.

Employers, including large Australian companies, also identify flexible working arrangements as a valuable recruitment and retention incentive for high value staff. This factor is seen as particularly important in a period of high labour market participation, low unemployment and skills shortages in some sectors. This trend is reflected internationally. The International Telework Association found that each American Express teleworker saves the organisation more than US\$10 000 (AUD\$13 600) a year in costs related to reduced absenteeism and improved job retention<sup>9</sup>.

Workplace flexibility allows employers to attract and retain staff by facilitating flexible employment options to meet individual staff needs and to access a larger pool of employees. By demonstrating flexible workplace practices, employers are realising the benefits of being seen as an 'employer of choice'. A number of different employer awards are currently run in Australia recognising employers of choice, including the Employer of Choice for Women (EOWA)<sup>10</sup>, the Prime Minister's Employer of Choice Awards<sup>11</sup> for employers who provide work opportunities for people with disabilities and

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<sup>6</sup> *Sensis Insights Teleworking Report*, June 2005, p.13, p.15.

<sup>7</sup> [www.rta.nsw.gov.au/trafficinformation/downloads/rta\\_tw.pdf](http://www.rta.nsw.gov.au/trafficinformation/downloads/rta_tw.pdf)

<sup>8</sup> Canadian Telework Association, *Office Space & Innovative office Strategies*, [www.ivc.ca/part11.html](http://www.ivc.ca/part11.html)

<sup>9</sup> PC Update Online (4/2001), *What Happened to Telework?*, [www.melbpc.org.au/pcupdate/2104/2104article10.htm](http://www.melbpc.org.au/pcupdate/2104/2104article10.htm)

<sup>10</sup> [www.eowa.gov.au/EOWA\\_Employer\\_Of\\_Choice\\_For\\_Women.asp](http://www.eowa.gov.au/EOWA_Employer_Of_Choice_For_Women.asp)

<sup>11</sup> [www.pm.gov.au/your\\_pm/awards.html#employer](http://www.pm.gov.au/your_pm/awards.html#employer)

the Australian Chamber of Commerce and Industry (ACCI)/Business Council of Australia (BCA) National Work and Family Awards<sup>12</sup>.

### Better Work–Life Balance

The ATAC consultations indicated that from an employee’s point of view, telework adoption is primarily driven by a desire to achieve an improved work–life balance. Telework and home-based working opportunities provide workers, including employees and the self-employed, with more time to devote to their non-work commitments, by reducing required commuting times and locating working environments in closer proximity to the employee’s home and family. This is of value to part-time and full-time teleworkers, and to a lesser extent, for ‘day extenders’ who are able to extend their working hours into the home environment, rather than working back late at the office.

The ability to work flexibly is viewed as being increasingly important by employees. A 2002 survey of 2000 British Telecom (BT) teleworkers reported that 82 per cent felt that teleworking was important to their quality of life<sup>13</sup>. A UK 2002 *Positively Broadband* survey found that over 30 per cent of respondents preferred the option of teleworking to a higher salary<sup>14</sup>. According to the *Sensis Insights Teleworking Report*, 25 per cent of surveyed workers reported that they would like to telework, if given the opportunity. The same report found that teleworking was a positive experience for 62 per cent of individuals, because it was more flexible and convenient (42 per cent), gave them an option to work at home/outside the office (34 per cent) and enabled better work–life balance (9 per cent)<sup>15</sup>.

For working parents, the ability to work from home can enhance their capacity to better balance their work and caring responsibilities. In families with at least one parent employed, 35 per cent made use of flexible working hours, 24 per cent used permanent part-time work and 16 per cent used work from home arrangements to help care for their children<sup>16</sup>. The needs of carers for people with disabilities and mature aged workers have also been highlighted given that they too need to be able accommodate their caring commitments in a flexible way.

An issue which may affect the capacity for telework to assist employees with caring responsibilities is the need to have separate caring arrangements for their child, partner or relative, rather than using telework as a substitute. While telework has the potential to improve a person’s work–life balance, it is dependent on other variables such as the way care is shared or arranged in the household<sup>17</sup>. For example, it may be unreasonable for a

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<sup>12</sup> [www.workplace.gov.au/workplace/Category/SchemesInitiatives/WorkFamily/WorkandFamilyAwards.htm](http://www.workplace.gov.au/workplace/Category/SchemesInitiatives/WorkFamily/WorkandFamilyAwards.htm)

<sup>13</sup> Sustel, *Teleworking at BT: The Economic, Environmental and Social Aspects of its Workabout Scheme* (10/2002), URL: [www.ukceed.org/SUSTEL\\_BT\\_Pilot\\_Report.pdf](http://www.ukceed.org/SUSTEL_BT_Pilot_Report.pdf)

<sup>14</sup> Information Technology Association of America (7/2002), *e-Data Telecom: Positively Broadband Campaign Releases E-Work Survey Results*, URL: [www.ita.org/isecc/pubs/e20027-01.pdf](http://www.ita.org/isecc/pubs/e20027-01.pdf)

<sup>15</sup> *Sensis Insights Teleworking Report*, June 2005, p.13.

<sup>16</sup> Australian Bureau of Statistics, *Child Care*, 2002, Cat. No. 4402.0.

<sup>17</sup> C Diamond, ‘Telework: A “Family-Friendly” Work Arrangement’, *Labour and Industry*, Vol. 13, No. 1, August 2002, pp39-54.

teleworker to care for children or aged parents while doing a full day's work. However, the working day of a teleworker may be structured more flexibly, thereby enabling care obligations to be interwoven into a working day in a way that may not otherwise have been possible.

There are a number of public policy reviews of work–life balance and work and family issues currently under way. These include the House of Representatives Committee Inquiry into Balancing Work and Family<sup>18</sup> and the Human Rights and Equal Opportunity Commission (HREOC) inquiry, 'Striking the Balance: Women, Men, Work and Family'<sup>19</sup>. In ATAC's view, telework should be considered as a useful option to address issues relating to work–life balance.

### Gender Equity

The Australian Government has indicated support for women to access home-based work arrangements, as indicated in the 2004 Election Policy 'Australian Women—Opportunities for Life'<sup>20</sup>. Telework can provide a means to support women with young families, mature aged women, and women in regional and rural areas, by providing more flexible work arrangements.

The statistics on telework suggest that there is some differentiation between men's and women's telework experience. The *Sensis Insights Teleworking Report* indicates that 37 per cent of men and 23 per cent of women reported teleworking. The incidence of telework among businesses operated by men was also higher (35 per cent) than that of businesses operated by women (28 per cent)<sup>21</sup>.

However, both the Australian Bureau of Statistics (ABS) *Locations of Work* survey of 2000 and Household Income Labour Dynamics in Australia (HILDA) data from 2003 indicate that slightly more women than men telework. According to the ABS, of the 980 300 persons employed at home (either in their own business or through a formal arrangement at the workplace), 49 per cent were female compared with 44 per cent of all persons at work<sup>22</sup>. Excluding the self-employed, the HILDA data show that 16.8 per cent of male employees and 17.4 per cent of female employees worked some hours from home<sup>23</sup>. Given the differences in definition between the surveys, it would be useful to examine gender differences in future research.

Telework can be of particular assistance to women who combine paid work with caring roles. In 2002, around 200 000 female employees took a break of six months or more

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<sup>18</sup> House of Representatives, Standing Committee on Family and Community Services, 'Inquiry into Balancing Work and Family', [www.aph.gov.au/house/committee/fhs/workandfamily/index.htm](http://www.aph.gov.au/house/committee/fhs/workandfamily/index.htm)

<sup>19</sup> Human Rights and Equal Opportunity Commission, 'Striking the Balance: Women, Men, Work and Family' Discussion Paper, [www.humanrights.gov.au/sex\\_discrimination/strikingbalance/index.html](http://www.humanrights.gov.au/sex_discrimination/strikingbalance/index.html)

<sup>20</sup> The Howard Government, Election 2004 Policy, Australian Women – Opportunities for Life, p.9. [www.liberal.org.au/default.cfm?action=plaintext&id=515](http://www.liberal.org.au/default.cfm?action=plaintext&id=515)

<sup>21</sup> *Sensis Insights Teleworking Report*, June 2005, p.6.

<sup>22</sup> Australian Bureau of Statistics, *Locations of Work*, June 2000, Cat. No. 6275.0.

<sup>23</sup> Unpublished data, *Household Income Labour Dynamics in Australia Survey*, 2003, Wave 3, release 1.0.

with their employer, 73 per cent of whom cited ‘family reasons’ as the main reason for their most recent break<sup>24</sup>. Similarly, the majority of primary carers of people with a disability or elderly people are women (71 per cent in 2003)<sup>25</sup>. Around the time of birth of a child and at other peak caring periods across the life cycle, working from home may provide women with greater opportunities to retain their attachment to the labour force and maintain an independent source of income. Alternatively, telework also enables male partners and carers to take on a greater share of caring responsibilities.

Despite the benefits outlined above, it can be difficult to care for young children or other dependents while working from home, and some organisations prohibit the use of telework in place of formal caring arrangements. The traditional gender division of labour in the household may have the unintended effect of reinforcing female teleworkers’ role as carers and domestic managers in the home<sup>26</sup>. Thus, it is important for there to be adequate support for the caring responsibilities of home-based teleworkers as well as in those operating in the traditional office environment.

### Mature Age Workers

Australia, along with other developed countries, is experiencing an ageing of its population and labour force. Available workers are growing older and there are fewer young workers entering the labour market. As a result, over the next five years the potential shortfall in workers could be as large as 195 000<sup>27</sup>. Consequently, employers are facing greater competition for workers and will need to use flexible workplace practices, including telework, to attract and retain the workers needed to remain commercially viable. The number of people aged 55 to 64 is projected to increase by more than 50 per cent over the next two decades<sup>28</sup>. Yet currently around 35 per cent of males and 57 per cent of females aged between 55 and 64 are not in the workforce<sup>29</sup>.

For mature age workers, telework could enhance attraction and retention (including beyond age 65) by:

- allowing reduced or flexible work hours, as part of phased retirement;
- facilitating a change in the type of work undertaken (such as more project work), as part of phased retirement;
- reducing the ‘costs’ of work (such as daily commuting and clothing);
- providing more flexible arrangements to help address health and mobility restrictions;

<sup>24</sup> Australian Bureau of Statistics, *Career Experience*, November 2002, Cat. No. 6254.0.

<sup>25</sup> Australian Bureau of Statistics, *Disability, Ageing and Carers*, 2003, Cat. No. 4430.0.

<sup>26</sup> C Diamond, ‘Telework: A “Family-Friendly” Work Arrangement’, *Labour and Industry*, Vol. 13, No. 1, August 2002, pp39-54.

<sup>27</sup> Department of Employment and Workplace Relations, *Workforce tomorrow: Adapting to a more diverse Australian labour market*, 2005, [www.workplace.gov.au/workplace/Category/ResearchStats/LabourMarketAnalysis/WorkforceTomorrow-AdaptingtoamorediverseAustralianlabourmarket.htm](http://www.workplace.gov.au/workplace/Category/ResearchStats/LabourMarketAnalysis/WorkforceTomorrow-AdaptingtoamorediverseAustralianlabourmarket.htm)

<sup>28</sup> Australian Government, *Intergenerational Report 2002-2003*, Budget papers.

<sup>29</sup> Australian Bureau of Statistics, *Labour Force Survey*, Cat. No. 6291.0, September 2005.

- enabling a better and more flexible balance between work and other commitments (such as caring responsibilities, volunteering and social activities); and
- making distance from the workplace no barrier and permitting work from distant locations (for example, facilitating a ‘sea change’).

For employers, telework could enhance attraction and retention of mature age workers by facilitating flexible staffing arrangements, mitigating specialist skill shortages, and enabling periodic access to experienced workers to meet work peaks; enabling continued access to experience and knowledge that might otherwise be lost; and maintaining workforce diversity and potentially increasing the diversity of inputs and influences into projects.

The Productivity Commission research report *Economic Implications of an Ageing Australia* identified measures to raise productivity and labour force participation as one of the key means to enhance income growth and help increase the nation’s capacity to pay for the costs of ageing.

As part of the Australian Government’s Mature Age Employment and Workplace Strategy, a Jobwise website has been developed, which has further information on mature age employment issues<sup>30</sup>.

### **Workers in Regional and Rural Communities**

Telework arrangements have the potential to provide new employment and economic opportunities for communities located in regional and rural areas many of which have been ravaged by long periods of drought and declining business revenues.

Telework can provide people living in regional and remote areas with professional development opportunities, peer support and networks, career paths and an alternative source of income particularly for spouses and partners of farm workers. It can have spin off benefits for local industry in terms of creating demand for local ICT services and support and computer sales. It can provide opportunities for greater work–life balance, by reducing significant travel times even within regional areas. This could also assist families and communities financially given rising fuel prices. It may also encourage greater self-sufficiency and opportunities for development in regional areas.

While these benefits are compelling, teleworking opportunities are currently difficult to source in rural and regional areas. Locating telework jobs in remote areas can provide wins for employers as well as employees. This point was emphasised by Chris Capel, a strong advocate for rural based telework, and a teleworker for the Queensland Office of Rural Communities in Longreach since 1997, in her presentation and written submission to ATAC on her experiences as a female teleworker in rural Australia.

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<sup>30</sup> [www.Jobwise.gov.au](http://www.Jobwise.gov.au)

Regional, rural and remote teleworkers are particularly likely to benefit from an increased availability of telecommunications services, such as mobile telephony, broadband and wireless Internet. However, it is important to note that non-metropolitan communities are likely to have less access to reliable and higher-speed network technologies, and may be offered less choice between service providers. (See 'ICT as enabler' chapter).

Pilot projects or brokerage services could be of significant assistance to provide impetus for regional telework. The general lack of awareness of telework needs to be addressed and support provided for managers in regional areas (through guidelines and training modules). Other issues relevant to all teleworkers are also important for regional teleworkers such as dealing with isolation and possible lack of career development opportunities.

### People with Disabilities

One in five people in Australia (or around 4 million Australians) report some level of disability. Disability, defined by the ABS as any limitation, restriction or impairment which has lasted or is likely to last for at least six months and restricts everyday activities, can range from hearing loss, to difficulty dressing due to arthritis, to advanced dementia requiring help and supervision. Given that not all people with disabilities are able to work or can find suitable work, the labour force participation rate of people with a disability (at 53 per cent) is much lower than the participation rate of people without a disability (80 per cent)<sup>31</sup>.

While the ability to work flexibly is viewed as being increasingly important by all employees, flexible work practices are often a necessity for many workers with disabilities. During ATAC consultations, workers with disabilities indicated a need for arrangements such as flexible hours of work, being able to change work hours for periods when they are unwell, flexibility regarding access to sick leave and the ability to work from home<sup>32</sup>.

Telework offers individuals with disabilities opportunities for a better involvement in the workforce than has previously been available in conventional workplaces. People with disabilities often experience a range of barriers to undertaking paid work such as inaccessible workplaces, public buildings and public transport; inflexible work schedules which do not accommodate the needs of people who cannot work a full day, or who have an unreliable supply of care workers or unreliable transport; and the financial costs of participating in work, such as the cost of taxis or equipment needed for work<sup>33</sup>. Telework can assist in addressing these barriers.

It should be noted however that there are often high set up costs for assistive technology which may make it difficult to employ people who require significantly modified

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<sup>31</sup> Australian Bureau of Statistics, *Disability, Ageing and Carers*, 2003, (Cat. No. 4430.0).

<sup>32</sup> Human Rights and Equal Opportunity Commission, *Interim Report – National Inquiry into Employment and Disability*, August 2004, p23. [www.hreoc.gov.au/disability\\_rights/employment\\_inquiry/index.htm](http://www.hreoc.gov.au/disability_rights/employment_inquiry/index.htm)

<sup>33</sup> Public submission, Morrell.

workplace accommodation. There is also a risk of marginalisation of teleworkers, particularly if people with disabilities require supervision and assistance. The need for added support and risk of marginalisation may ameliorate some of the positive benefits of telework for some groups of workers with disabilities.

Of relevance for the telework review, the Government's Welfare to Work reforms will support greater workforce participation for people with disabilities. Measures include increasing employer demand for employment of people with a disability; the development of a new one-stop-shop website and information and advice service for employers, service providers and employees with disabilities; an extra \$25 million over four years to boost the Workplace Modifications Scheme; and an extra \$5 million over four years to increase the Wage Subsidy Scheme<sup>34</sup>.

## 2.2: Barriers to Telework in the Workplace

It is clear that telework has large potential benefits both for businesses and employees. So why is it not more common in Australian workplaces? The section below details the major barriers to telework which currently impede its wider implementation in organisations.

### Job Design and Nature of the Work

The nature of some jobs makes it very difficult for work to be undertaken remotely. The *Sensis Insights Teleworking Report* found that 76 per cent of businesses that did not have employees teleworking said that the main barrier was a belief that it was not suitable for their type of work. Certain labour intensive jobs such as in agriculture, mining, manufacturing and construction require on-site, hands-on work which prohibits widespread telework. Also, teleworking is not prevalent in occupations which involve servicing clients directly such as in retail, health and community services, cultural and recreational services and accommodation, cafes and restaurants.

However, even within these industries many types of work can be undertaken remotely such as:

- sales (telemarketing and mobile sales work);
- human resource management, training and support;
- customer service and support (providing information, counselling and advice);
- accounting and other financial services;
- data processing;

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<sup>34</sup> The Workplace Modifications Scheme reimburses employers for costs involved in modifying the workplace or purchasing special equipment for people with disabilities. DEWR is currently reviewing the Scheme to improve access. Issues that are being considered include broadening the eligibility criteria and the nature of modifications that can be reimbursed, simplifying the Scheme's guidelines and procedures and increasing the amounts available for each claim.

- software development, technical maintenance and support; and
- editorial, design and creative functions, including research and development<sup>35</sup>.

For any role to be teleworked, consideration should be given to having an appropriate mix of tasks, clearly defined objectives and performance indicators, and work which can be assessed on an individual basis. Research and report writing, data and policy analysis and case work are all examples of tasks which can be teleworked.

### Cultural Resistance

ATAC consultations revealed the single most important barrier to greater take up of telework is the attitude of managers and employees to telework within the workplace. There are many managers who retain a traditional view of working behaviour, and do not believe that employees can work effectively without being located in the office. There can be a perception that people who telework are not committed to their jobs, or will necessarily miss out on promotional opportunities due to their reduced interaction in the office. Particularly in workplaces where there is a long working hours culture, the perception that someone is 'opting out' by teleworking may be influential.

Co-workers may also see telework as an unfair privilege, rather than a legitimate and productive working arrangement. The Toshiba *Mobility and Mistrust* survey indicated that 54 per cent of employees do not think their flexible working colleagues work as hard as they do. Almost three-quarters (71 per cent) of employees think flexible workers are subject to negative gossip. If there is a perception that telework is a privilege, managers may be reluctant to allow workers to telework, unless they have a specific 'legitimate' reason, e.g. an injury or disability that prevents them from coming to work. Also, teleworkers themselves may believe that they need to work twice as hard to 'justify' their privileged position.

This cultural resistance from within some organisations is impeding the further growth of telework in Australia. The UK 2002 *Positively Broadband eWork* study found that many workers believed that teleworking was not an option in their workplace because "it did not fit into the culture of the organisation"<sup>36</sup>. The Toshiba *Mobility and Mistrust* survey found that flexible working arrangements were not available in 63 per cent of large organisations in Australia and New Zealand, and 75 per cent of managers within these organisations would not allow their employees to work flexibly even if the arrangements were available<sup>37</sup>.

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<sup>35</sup> P Standen & J Sinclair-Jones, 'eWork in Regional Australia', *A report for the Rural Industries Research and Development Corporation*, June 2004, RIRDC Publication No. 04/045, p iv.

<sup>36</sup> Information Technology Association of America (7/2002), *e-Data Telecom: Positively Broadband Campaign Releases E-Work Survey Results*, [www.ita.org/isec/pubs/e20027-01.pdf](http://www.ita.org/isec/pubs/e20027-01.pdf)

<sup>37</sup> <http://www.isd.toshiba.com.au/sig/downloads/Mobility&Mistrust.pdf>

### Managing Telework

Few managers possess the skills or training to supervise remote working staff effectively. According to the Toshiba *Mobility and Mistrust* survey, of managers who did not support teleworking arrangements, 65 per cent cited difficulties relating to the proper supervision of remote working employees as the single most important impediment<sup>38</sup>.

There is a perception among managers that if one person teleworks, everyone will want to telework and there will be no one left in the office. There is also concern of being unable to control employees if they are not present in the workplace. Conversely, workers may feel exposed if their manager is not in the office to respond to situations. There may be difficulties with communications if people are reliant on interacting face to face. The perceived 'harshness' of email communication, compared with communication in person, can also add to the difficulty in managing working relationships. Other problems for management of telework include mistrust from co-workers, encouraging team building and difficulties with measuring performance.

Issues related to telework management can cause concern for employees and managers. Telework arrangements which employ results orientated work programs, and which have clear performance management frameworks and effective communication channels, are the ones likely to realise productivity gains and work to the satisfaction of workers and managers in the long term.

### Potential Regulatory Barriers

While regulatory barriers are not particularly widespread, there is evidence that there are some regulatory issues which impact the ability of organisations to undertake telework. For some workplaces which are covered by awards for example, overtime rates, penalty rates and specified working hours can make hours flexibility and the ability to work outside standard hours away from the traditional workplace more costly or difficult.

Agreement making allows employers and employees to negotiate working arrangements tailored to the individual workplace. As of 30 June 2005, 306 Federal certified agreements, covering 236 000 employees, had work from home provisions<sup>39</sup>. A central objective of the Government's Work Choices legislation is to encourage the further spread of workplace agreements including incorporating flexible working arrangements such as work from home provisions by simplifying the agreement making process. Informal policies and guides also enable workplaces to offer telework, and statistics indicate that informal telework arrangements are much more common.

Other regulatory barriers include tax arrangements, such as the impact of fringe benefits tax and treatment of land tax. Some organisations have reported that the attraction of fringe benefits tax on goods and services provided to employees to allow them to

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<sup>38</sup> Ibid.

<sup>39</sup> Department of Employment and Workplace Relations, Workplace Agreements Database, 30 June 2005.

telework is a major disincentive. In terms of a tax incentive, the Queensland Government has recently introduced new regulations which will allow exemptions from land tax for those using their residence for work purposes.<sup>40</sup> These changes have been made in recognition of changing work arrangements. Provision of information about the different tax arrangements for home-based self employed workers and teleworkers would assist guide decision making around telework.

### **OH&S Requirements, Workers' Compensation and Other Costs**

Under OH&S legislation in all jurisdictions, employers have responsibility for taking all reasonable steps to ensure the health and safety of employees, by providing and managing a safe workplace. Employees also have a duty to take all reasonably practical steps to ensure their own health and safety at work. These responsibilities extend to the home office for the purposes of workers' compensation and accident prevention when the employee is working from home. In some jurisdictions, the legislation now specifically requires a risk assessment of the home office to be undertaken.

Even where this is not a specific legislative requirement, if there is a formal home-based work arrangement with an employee, the employer would generally be responsible for conducting an OH&S assessment of the employee's home to meet their general duty of care towards employees. For many SMEs, this may be a costly exercise which acts as a disincentive to allowing formal telework.

While the challenges for both employers and employees to ensure that they meet their OH&S obligations in non-standard workplaces are significant, they are not insurmountable. Judicious application of risk management, including hazard identification, risk assessment and risk control should adequately address these. There are a number of health and safety related issues to consider when setting up a home-based work program or business, including:

- the suitability of the range and duration of activities for this environment;
- the suitability of the design of the home office, including workplace layout, provision of furniture, equipment and separation from other areas of the home;
- the environment—e.g. lighting and thermal comfort;
- the selection, motivation and management of staff; and
- training in safe procedures.

Employers and employees should also familiarise themselves with the provisions of the relevant State OH&S legislation. Employers should develop policies and procedures to cover the OH&S issues of working at home, including job design, hours of work, breaks and task variation.

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<sup>40</sup> Queensland Treasury, 'Chapter 5: Revenue', *Budget Strategy and Outlook 2005-2006*, p80. [www.budget.qld.gov.au/pdfdocs/bp2-section5.pdf](http://www.budget.qld.gov.au/pdfdocs/bp2-section5.pdf)

Many large private sector organisations consulted by ATAC already have flexible working and home-based working OH&S guidelines built into their human resources strategies. However, the *Sensis Insights Teleworking Report* found that 87 per cent of teleworking SMEs use informal arrangements, potentially without reference to OH&S requirements and guidelines.

The fear of workers' compensation costs also remains a barrier for the introduction of telework, particularly among small businesses. The idea that employers will have to cover workers' compensation claims which occur in the home or remote working environment in addition to the traditional workplace creates the impression of an increase in their overall liability.

However, the evidence from consultations indicates that the fear of workers' compensation claims arising from telework is not borne out. The NSW RTA has not had a single telework related claim in the 10 years or so that it has had a telework policy. Also, home working environments may be safer and more suitable for some employees, such as employees with disabilities and mature aged workers, and the nature of their work than an office environment, therefore decreasing the risk of compensation claims.

The other area of cost which impacts on employers' perception of telework is the need for public liability insurance, to cover clients who visit the employee's home or remote office. Some organisations require their employees to pay for their own public liability insurance, while others provide for this. As with taxation and OH&S implications, accessible information about public liability insurance would be of assistance for organisations which are considering telework.

### **Privacy and Security**

Privacy and security concerns are sometimes raised by business in relation to telework, particularly for occupations which deal with sensitive data and information, such as the legal and medical profession, finance and business sector and welfare and government agencies. Organisations have responsibility to exercise care in the use and dissemination of private information and need to maintain the security of their information and assets. This extends to information and assets used by teleworkers away from the office. Employers should therefore establish policies and procedures to maintain privacy and security, and ensure that employees are aware of their rights and responsibilities.

There are also measures to secure system networks and data on equipment such as notebook PCs, desktop PCs and handheld personal digital assistants. To the extent that employers are unaware of how to protect the privacy and security of their resources, it would be useful to have readily accessible information on relevant resources, policies and arrangements.

### **Overwork and Job Fatigue**

There are a number of barriers and potential negative impacts to telework for employees.

According to the *Sensis Insights Teleworking Report*, while 62 per cent of teleworkers found telework to be a positive experience, 13 per cent reported a negative impact. The negative impacts respondents reported included having to work longer hours (22 per cent), taking time away from family (19 per cent) and too much pressure after hours (17 per cent)<sup>41</sup>. Although time saved from commuting can provide teleworkers with extra flexibility, some of this time saved is spent working, rather than on family or other responsibilities. A recent UK University of Bradford survey found that 69 per cent of teleworkers increased their working hours, with 45 per cent reporting an increase of more than nine hours a week<sup>42</sup>.

Employee overwork and job fatigue can particularly impact day extenders, working from home on top of their usual day or week's work. Employees may work longer hours to demonstrate that a teleworking arrangement is working well, particularly when telework is perceived as a 'privilege' in the workplace. Working in a home environment may make it difficult for teleworkers to disengage from work, and may result in a blurring of work and home life boundaries. For teleworkers with caring responsibilities, mature age teleworkers or teleworkers with disabilities, working long hours may counteract some of the benefits associated with telework arrangements.

### **Worker Isolation**

Isolation is often cited by employees as the biggest drawback of telework. Humans are naturally social beings and need human interaction as an essential part of their health and well-being. The loss of camaraderie which accompanies a move away from the central office is something which many teleworkers are not prepared for. Many office workers appreciate being able to workshop ideas with others, rely on support and advocacy roles of others in the office, being brought up to date on workplace developments and just having a chat with colleagues. The University of Bradford survey noted that 19 per cent of respondents found the drawbacks of telework more significant than initially anticipated<sup>43</sup>. Teleworkers may also feel that their career is being impeded by a lack of social interaction with managers and colleagues, and by not 'being seen' in the office.

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<sup>41</sup> *Sensis Insights Teleworking Report*, June 2005, p.15.

<sup>42</sup> Sustel, *Teleworking at BT: The Economic, Environmental and Social Aspects of its Workabout Scheme* (10/2002), [www.ukceed.org/SUSTEL\\_BT\\_Pilot\\_Report.pdf](http://www.ukceed.org/SUSTEL_BT_Pilot_Report.pdf)

<sup>43</sup> Ibid.

## Chapter 3: ICT as an Enabler

ICT, including telephones, mobile phones, PCs and Internet connectivity, clearly enable remote work and flexible working behaviours. The *Sensis Insights Teleworking Report* identified the mobile phone as the primary tool of choice for many teleworkers (53 per cent), with broadband (25 per cent) and dial-up Internet (20 per cent) also relatively prevalent<sup>44</sup>. With its high uptake of mobile phones (89 per cent), and PCs (66 per cent), Australia is well positioned to seize the opportunities of telework.

Advances in ICT, including the continued deployment of high-speed Internet, the proliferation of wireless connectivity and hand-held access devices, and the development of innovative new business and collaboration applications has made flexible working an increasingly viable proposition for many more Australians. Teleworkers are now able to use available ICT products and applications to simulate a virtual office in their home-based or remote working environment.

Nevertheless, evidence suggests that poor access to technology can still be an uptake barrier. Inadequate ICT tools was mentioned in a 2005 NSW Chamber of Commerce survey as preventing 16 per cent of non-metropolitan companies (with staff that could potentially telework) from offering telework arrangements to staff<sup>45</sup>. The lack of adequate technical back-up and real-time help-desk support for teleworkers and home-based workers may be one important impediment to the effective realisation of ICT-enabled flexible working arrangements for many Australian workers.

It is clear from ATAC stakeholder consultations, that while government actions are addressing a range of telecommunication access issues in underserved markets, there remains elements of the workforce that remain unable to acquire the technological capacity required to undertake teleworking arrangements effectively, whether for cost, coverage, technical or capability reasons.

### 3.1 Internet and Broadband

Evidence suggests that broadband Internet is becoming an increasingly important enabler of remote working arrangements, allowing workers to engage in richer communication with clients and colleagues, and to transfer and receive larger amounts of data in shorter periods. According to a 2002 AT&T survey, on average, broadband-enabled employees worked at home twice as often as those that did not have access to high-speed Internet, and the inability to download large files is the single most important inhibitor to the telework arrangements<sup>46</sup>.

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<sup>44</sup> *Sensis Insights Teleworking Report*, June 2005, p.11.

<sup>45</sup> State Chamber of Commerce (NSW), *Getting a Grip on IT*, May 2005

<sup>46</sup> AT&T (2002), 2001/2002 Employee Survey Results - Telework, Business Benefit and the Decentralized Enterprise, [www.att.com/telework/article\\_library/survey\\_results\\_2002.html](http://www.att.com/telework/article_library/survey_results_2002.html)

Australian consumers and the business community have been enthusiastic in their uptake of Internet and broadband. Of businesses surveyed in the 2005 *Sensis e-Business Report*, 88 per cent indicated having an Internet connection<sup>47</sup>, and 11.2 million Australians (68 per cent of the population), used the Internet (either broadband or narrowband) in August 2005<sup>48</sup>. Household broadband subscriptions increased by 98 per cent in the 12 months to September 2005 to over 2.5 million<sup>49</sup>. Over three-quarters of all Internet-enabled SMEs are now broadband-enabled<sup>50</sup>.

Nevertheless, the cost of broadband services, including installation, subscription and download charges, are potential impediments to the broader uptake of telework. There remains debate about exactly what impact price has on the adoption of broadband, and in many cases expenses associated with broadband access may be less than the costs of commuting to an office. However, it is clear that if services are not considered to be affordable and value for money, businesses and teleworkers will not use them. Access to high-speed Internet may be particularly expensive in regional and remote Australia, where satellite is the only broadband service option available.

The vast distances of the Australian outback present unique challenges to the Australian broadband sector, and costs associated with the deployment and maintenance of broadband infrastructure in isolated areas has meant that not all Australian workers are currently able to access affordable high-speed Internet. While all areas are covered by broadband satellite, these services are comparatively expensive, and have latency issues which may prevent the effective use of real-time collaboration applications and video conferencing tools.

Network reliability is another factor which may potentially undermine the efficacy of telework arrangements. In this context, poor infrastructure maintenance and untimely fault repairs may impede the capacity of teleworkers to maintain seamless communications with clients and co-workers.

### **The National Broadband Strategy**

Government broadband development initiatives are being coordinated through the framework of the National Broadband Strategy<sup>51</sup>. The Strategy, released in March 2004, provides a framework to coordinate broadband development activities between governments, and to provide a longer-term strategic perspective to guide broadband development in Australia. The National Broadband Strategy aims to improve equity of access to broadband services, including wireless broadband services across non-metropolitan Australia, at prices broadly comparable to urban areas, and do so in a way that supports competition in the developing broadband market.

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<sup>47</sup> [www.about.sensis.com.au/media/pdf/Sensis\\_ebusreport2005.pdf](http://www.about.sensis.com.au/media/pdf/Sensis_ebusreport2005.pdf)

<sup>48</sup> AC Nielsen, *Panorama*, September 2005.

<sup>49</sup> [www.accc.gov.au](http://www.accc.gov.au)

<sup>50</sup> [www.accc.gov.au](http://www.accc.gov.au)

<sup>51</sup> [www.dcita.gov.au/ie/broadband/strategy](http://www.dcita.gov.au/ie/broadband/strategy)

The whole-of-government approach to broadband development is enabling government jurisdictions and industry to collaboratively focus on strategic investments in Australia's broadband infrastructure, and so more widely distribute the economic and social benefits of broadband. The Strategy includes a range of regional connectivity funding initiatives, including the Higher Bandwidth Incentive Scheme, Coordinated Communications Infrastructure Fund, and Broadband Demand Aggregation Program<sup>52</sup>. These funding initiatives are designed to develop broadband infrastructure and availability, and support its effective use, including in underserved markets, and in key sectors.

In August 2005 the Australian Government announced *Connect Australia*—a communications package to give regional Australians access to telecommunications services with a \$1.1 billion roll-out of broadband, new regional clever networks, mobile services and Indigenous telecommunications<sup>53</sup>. Aspects of these new funding initiatives are currently being developed in consultation with relevant stakeholders. The impact of these initiatives is expected to significantly reduce the cost of broadband services for regional and rural consumers, and expand access to broadband infrastructure.

### 3.2: Wireless Connectivity

Wireless connectivity offers a convenient option for many mobile teleworkers. The *Sensis Insights Teleworking Report* identified mobile telephones and laptop computers as important technology enablers of flexible working activity. Wireless connectivity liberates workers from the office and the desk, and allows workers to engage in new ways of working, including from the road, on clients premises, and from the home.

The increased flexibility provided to Australian workers through the use of broadband-enabled hand-held access devices is potentially significant. For example, using a personal digital assistant with wireless connectivity, a medical worker in Brisbane is potentially able to receive a diagnosis or a patients ultrasound images from Longreach, while at home or away from her regular place of work.

Wireless connectivity is also often a less expensive deployment option than fixed-line technologies, and evidence suggests that it is able to extend the reach of high-speed Internet to remote communities, and facilitate the delivery of business and Government services into rural and remote areas.<sup>54</sup>

Emerging wireless technologies and platforms, including WiMax<sup>55</sup>, telephony-enabled personal digital assistants and third generation (3G) smart phones, are now being developed and deployed, which will make remote working and home-office environments increasingly convenient and amenable to telework arrangements. However,

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<sup>52</sup> [www.dcita.gov.au/ie/broadband/programs](http://www.dcita.gov.au/ie/broadband/programs)

<sup>53</sup> [www.dcita.gov.au/tel/broadband\\_connect/discussion\\_paper](http://www.dcita.gov.au/tel/broadband_connect/discussion_paper)

<sup>54</sup> [www.dcita.gov.au/\\_\\_\\_data/assets/pdf\\_file/24256/Government\\_use\\_of\\_wireless\\_broadband.pdf](http://www.dcita.gov.au/___data/assets/pdf_file/24256/Government_use_of_wireless_broadband.pdf)

<sup>55</sup> 'WiMax' is another name for the 802.16 wireless networking specification used for long-haul and backhaul connections.

wireless connectivity presents its own e-security challenges that need to be properly managed by organisations with flexible and remote workers.

### 3.3: Business Applications

The continued deployment of broadband and next generation network infrastructure will continue to support the development of innovative new business applications. Applications, such as voice over Internet protocol (VoIP), virtual private networks (VPNs), IP-based video services and online collaboration tools, are now being brought onto the market that are improving communication flows, streamlining transaction processes, and reducing the costs of doing business.

VPN technology is enabling organisations to manage secure communications between remote workers and central business locations. According to the *Sensis Insights Teleworking Report*, 15 per cent of Australian teleworking SMEs require technology to provide access between remote workers, and centralised organisational servers<sup>56</sup>. Inexpensive VPN products are now available which enable teleworkers to establish encrypted data flows with distant local area networks through the use of firewalls and authentication protocols, thereby enabling the security of a proprietary network, with the convenience and cost of the public Internet.

Internet protocol (IP)-based telephony services can save an organisation money in telephony costs, and make these expenses more predictable for budgeting purposes. VoIP potentially enables rural teleworkers, and teleworkers working in global teams, to reduce their long-distance telephony charges. These savings are potentially very significant. The Alexis de Tocqueville Institution estimated that the US Government could save between 25–60 per cent of costs associated with a traditional telephony service by switching to VoIP<sup>57</sup>.

Online collaborative tools, such as Microsoft's Office Live product are now becoming available. These will enable workers to manage telephony, video and text-based communications in a seamless and integrated online environment. Collaborative applications are being used by many companies to create a highly-textured virtual office environment, and successfully manage telework and virtual teaming projects across cities and continents in real time. Many of these applications simulate a social environment between remote workers, lessening the potentially negative effects of employee isolation.

### 3.4: Assistive Technologies

Workers with disabilities face many unique working challenges, both in terms of travel, and access to standard office-based facilities and ICT tools. Home-based and remote working arrangements, supported by assistive technologies, can offer workers with

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<sup>56</sup> *Sensis Insights Teleworking Report*, June 2005, p.11.

<sup>57</sup> Information Week magazine (22/10/04), *Voice-Over-IP Could Save Big Tax Bucks, Study Says*, [www.informationweek.com/showArticle.jhtml?articleID=51000394](http://www.informationweek.com/showArticle.jhtml?articleID=51000394)

disabilities improved opportunities compared to what might otherwise be provided in conventional workplaces. Businesses have obligations under the *Disability Discrimination Act* to provide ‘reasonable adjustment’ and equal access for workers with disabilities. This responsibility includes the provision of suitable assistive technologies to support the work of workers with disabilities.

Some Australian workplaces provide supportive work environments for workers with disabilities, and have a standard set of assistive technologies, including screen readers, magnification and voice recognition software. However, many organisations, including SMEs and public sector agencies, continue to deal with assistive technology in an ad-hoc and sub-optimal manner. For example, the 2002–03 *State of the Service Report* stated that a number of employees with disabilities in the public sector were dissatisfied with the technical support their employers had provided<sup>58</sup>.

The Workplace Modifications Scheme, administered by DEWR, reimburses employers for the costs involved in modifying the workplace or purchasing special equipment for people with disabilities. DEWR is currently reviewing the Scheme to improve access. Issues that are being considered include broadening the eligibility criteria and the nature of modifications that can be reimbursed, simplifying the Scheme’s guidelines and procedures and increasing the amounts available for each claim. Both the 2005 Standing Committee into *Working for Australia* and the current HREOC National Inquiry into Employment and Disability have made recommendations to further promote the scheme and extend its eligibility.

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<sup>58</sup> [www.apsc.gov.au/stateoftheservice/0203/report.pdf](http://www.apsc.gov.au/stateoftheservice/0203/report.pdf)

## Chapter 4: ATAC Policy Recommendations

ATAC has identified a public interest in the development of telework in Australia, and has concluded that the potential benefits of accelerated telework adoption are sufficiently positive to justify Government action to support their further enablement.

Arguments in support of this view include the need to enable increased productivity growth and business efficiencies. There are also public benefits associated with providing improved flexibility and work–life balance. Similarly, there are opportunities associated with the implementation of strategies which encourage the highest level of labour market participation in the context of Australia's existing skills shortages and ageing population. The rationale for Government support of telework uptake is supported by the environmental benefits associated with ICT-enabled flexible working arrangements, and by their capacity to enable improved government and business continuity.

The ATAC policy recommendations to Government are designed to support the growing telework trend in Australia, and promote the effective use of telework for Australian businesses and employees. The recommendations include the measurement and promotion of telework benefits to mainstream industry and identified target groups, dissemination of telework better practice strategy, and building of technological capacity for ICT enabled workers.

ATAC is of the view that the potential costs of implementing these recommended actions is likely to be modest relative to the impact which a mature teleworking environment could contribute to the Australian economy and broader community. Importantly, one of the ATAC recommendations involves the gathering of further telework adoption and usage data and investment in economic modelling. These research activities may potentially encourage the future commitment of more significant government spending, depending upon the analysis of relevant findings.

### 4.1 Management Training

The need for training resources for managers who are designing, implementing and supervising telework arrangements was a recurrent theme mentioned by stakeholders during the ATAC consultation process, and the increased availability of relevant curriculums was identified as a desirable policy outcome in the written submissions of a number of organisations, including CPA Australia, the Foundation for Australian Agricultural Women, the Disability and Information Resource Centre, and Dr John Gundry of Knowledge Ability Ltd.

Evidence suggests that some Australian managers have successfully adopted a teleworking management paradigm, and have already implemented effective communication processes and outcomes-orientated performance management frameworks. The *Sensis Insights Teleworking Report* found that a significant proportion

of businesses employing teleworkers are satisfied with the arrangements (73 per cent), with productivity benefits seen by many as a key benefit (17 per cent).

However, evidence gathered during the consultation process suggests that many managers take a traditional view of the way work should be done, and fail to identify telework as a legitimate and viable work alternative. The reluctance of some managers to endorse and support telework practices may be largely due to inadequate skills and training. Initial research suggests that while many management courses have modules that focus on aspects of human resource management, there are few that are especially relevant to telework.

### **Needs Analysis**

ATAC recommends that Government support the development of telework training programs for managers who design, implement and/or supervise telework arrangements. To support this objective, the Government should support research into the identification of gaps in the provision of telework related curriculums and modules by the Australian higher education sector, and vocational and educational training institutions.

### **Support development of Telework Training Resources**

To support the development of telework training modules in mainstream curriculums, Government should engage in discussions with relevant stakeholders including industry, tertiary education, and vocational and educational training sector providers. It is envisaged that key target groups for such training will include managers who supervise teleworkers with disabilities, in rural areas, and in the public sector.

ATAC notes that e-learning has the advantage of being location independent, and is particularly accessible for remotely located managers. Therefore, ATAC also recommends that Government support the development of online telework learning modules as its preferred medium for management training in this area.

## **4.2 Building Technological Capacity**

The ATAC review of telework identified cultural impediments, rather than access to technology, as the critical impediment to telework uptake. Nevertheless, ICT has clearly become an important enabler of flexible working practices, and many stakeholders engaged during the consultation process, including Citrix, CPA Australia, Dr Chris Diamond, and SWISHzone, recommended the further development of accessible, reliable and affordable telecommunications services, to support accelerated telework uptake.

In the modern Australian economy technology has become an increasingly important driver of workplace efficiencies. For example, the 2005 *Productivity Growth in Service Industries* paper, prepared by DCITA, identified a strong correlation between labour

productivity growth and ICT intensive industries<sup>59</sup>.

The *Sensis Insights Teleworking Report* found that ICT, including mobile telephones, PCs and Internet and broadband connectivity, are all tools which are being utilised by Australian teleworkers. However, evidence gathered during the ATAC consultative process suggests that some workers, including those located in regional, rural and remote Australia, do not currently possess the skills and equipment, and access to network connectivity, required to do their jobs effectively.

To build technological capacity for ICT-enabled workers, ATAC recommends that the Australian Government:

- support continued investment in the effective use and availability of ICT and broadband infrastructure in under-served markets;
- support the strategic coordination of telework initiatives between different government jurisdictions; and
- promote the use of assistive technologies.

### **Investment in the Effective Use of Technology**

ATAC recognises that potential teleworkers require information and training to enable them to take full advantage and make effective use of ICT. To support the capacity of workers to utilise technology to full effect, ATAC recommends that Government support initiatives that raise awareness within the labour market and business community of emerging technology tools. This will include information on their effective use, information management and e-security better practice strategies.

ATAC also recommends that Government support research into the challenges and impediments that teleworking businesses and remotely located employees encounter while using ICT in their working environments.

### **Strategic Coordination of Telework Policy**

ATAC recommends that the National Broadband Strategy Implementation Group (NBSIG), would be well placed to maintain a watching brief over telework issues, and oversight the implementation of any responses to ATAC policy recommendations. The NBSIG is responsible for developing and monitoring the implementation of the National Broadband Strategy and provide the focal point for the coordination of activities at all levels of government in relation to broadband,

The NBSIG is comprised of representatives from all government jurisdictions, as well as from the health and education sectors. This broad representation provides the NBSIG with a sound understanding of policy issues related to the role of technology in supporting business productivity, and draws on prior involvement in the development of

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<sup>59</sup> *Managing and Sustaining the APS Workforce*, Management Advisory Committee, APSC 2005  
[www.apsc.gov.au/mac/apsworkforce.pdf](http://www.apsc.gov.au/mac/apsworkforce.pdf)

advice to the Minister on broadband-enabled telework policy.

### **Assistive Technologies**

ATAC recognises that home-based work through the use of assistive technologies enable many workers with disabilities to engage in work in accordance with their needs. These ICT-enabled home-based work arrangements allow workers with disabilities to be closer to their own support services and avoid the need for travel. However, while providing 'reasonable accommodation' for workers with disabilities is a legislated requirement for employers, evidence suggests that many workers with disabilities may not be receiving the level of support they require.

ATAC recommends that the Government promote the use of assistive technologies in the private and public sectors, including by promoting its Workplace Modification Scheme and its applicability to teleworkers with disabilities.

### **Investment in Regional Connectivity**

ATAC recognises the importance of regional connectivity programs currently being funded by various government jurisdictions such as the National Broadband Strategy framework, and other relevant funding initiatives such as the Government's Connect Australia package. ATAC recommends that all levels of government continue to support initiatives that improve telecommunications and broadband infrastructure in under-served markets and regional, rural and remote areas, to improve the telework opportunities of ICT-enabled workers.

### **4.3 Telework Online Resource Centre**

ATAC is of the view that a Telework Online Resource Centre with a centralised repository of telework information and better practice strategies would:

- support the capacity of workers to undertake ICT-enabled flexible work;
- inform the decisions of employees considering telework initiatives; and
- raise the profile of telework to the broader community.

ATAC notes that the development of such a web-presence was a key recommendation of the 2003 Department of Family and Community Services ICT to Support Flexible Working Practices Inter-Departmental Committee.

ATAC recommends that the Telework Online Resource Centre be funded by Government, including with possible assistance and support from industry. Management of the site could occur from within a Commonwealth agency, such as the DCITA, or a relevant educational institution.

### Resource Catalogue

ATAC recommends that Government consult with relevant stakeholders to enable the identification and cataloguing of existing resources from which the Online Resource Centre could be compiled. Stakeholders include government agencies, education and training providers, industry associations, organisations identified as telework exemplars and peak bodies representing key target groups.

### Telework Online Resource Centre

ATAC recommends that the Online Resource Centre contain a range of current information, including ICT and OH&S checklists, implementation guides, fact-sheets, and telework case studies from exemplar organisations. The site could also include information and links to relevant training and education providers.

The Online Resource Centre could also include interactive forums and chat facilities. These types of facilities could assist by providing a sense of community and a means of information exchange for teleworkers, many of whom experience feelings of isolation while undertaking their work or are located in rural areas far removed from their colleagues and clients.

It is envisaged that the Online Resource Centre would also contain information directly relevant to identified target groups, including details on support needs for teleworkers with disabilities, and support tools for regional and mature aged workers. The site could also include information for workers with caring responsibilities, including details on community-funded assistive technology and rehabilitation centres.

## 4.4 Promote and Support Telework in the APS

ATAC recognises that a large proportion of public-sector work is potentially suited to telework arrangements. ATAC also acknowledges the Australian Government itself faces significant challenges in meeting the expectations and career preferences of its APS workforce for more flexible employment arrangements and for conditions which promote a work–life balance. This is reflected in the findings of the 2005 report *Managing and Sustaining the APS Workforce*<sup>60</sup> :

- Staff at all levels and in all areas of the 21<sup>st</sup> century APS will increasingly need to be multi-skilled, flexible and intellectually agile in order to deal with the challenging new issues and areas of work created by economic, societal and technological change;
- Workers in their 50s or older who are looking for reduced hours of work and/or level of responsibility would be suited to more flexible employment arrangements;

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<sup>60</sup> [www.dcita.gov.au/ie/publications/2005/august/productivity\\_growth\\_in\\_service\\_industries](http://www.dcita.gov.au/ie/publications/2005/august/productivity_growth_in_service_industries)

- The APS becoming “an employer of choice” involves providing remuneration levels, conditions of employment and career and development opportunities that are more attractive to potential recruits than those offered by competing employers; and
- In particular, young skilled employees—so called Generation X and Y knowledge workers—are increasingly looking for employers who will provide them with flexible and challenging working arrangements and opportunities to use their superior abilities, and understanding of ICT to benefit the organisation.

Given the above, ATAC considers that the promotion, support and management of telework in the APS is a necessary area of focus. ATAC also considers that such a focus would best position the Australian Government to influence the wider labour market as a potential ‘model employer’ in the telework context.

The capacity for the APS to be a ‘teleworking role model’ in the development and implementation of ICT-enabled flexible working models was a policy recommendation repeated throughout the public consultation process. A number of written submissions to ATAC supported this recommendation, including submissions from Toshiba, Telstra, Citrix, the Disability and Information Resource Centre, the Foundation for Australian Agricultural Women, and Dr Chris Diamond.

Many state and territory governments, including in NSW, Queensland and the Northern Territory have been conducting telework pilots. Many Government agencies, such as Centrelink and the Australian Antarctic Outpost, also have long histories of ICT-enabled remote working arrangements. However, there has been little movement until now towards a whole-of-government approach to the development of better practice telework in the APS.

Research suggests however that the uptake of telework is generally higher in the public sector than in the private sector. According to the 2003 HILDA survey, public-sector workers (26 per cent) are twice as likely to work from home as private sector employees (14 per cent). This is further reinforced by the *Sensis Insights Teleworking Report* on teleworking recent which found that telework is prevalent amongst knowledge-based industries, such as the public sector.

However, anecdotal evidence suggests that many public sector teleworkers are doing so on an informal basis, as ‘day extenders’ or weekend workers. While the APS may have a long history of family friendly and flexible working arrangements, it is clear from ATAC consultations with APS agencies that the same sort of management and cultural issues affecting other workplaces also apply to the public service. The *2005 State of the Service* report indicated that the proportion of people in the APS with disabilities has declined over time. Therefore, a greater commitment to offering telework opportunities may improve accessibility of employment for people with disabilities.

Evidence suggests that formal telework in the APS is seen mainly as an option for special

need, such as for workers with disabilities, or short-term needs, including for workers returning from injury or parental leave. While this is often an effective use of telework, the message this sends to employers and managers is that telework is not a mainstream option for the general workforce.

### **Better Practice Guidelines**

ATAC recommends that the Australian Government support the development of an APS telework better practice guide, including information on OH&S and insurance liability issues, case-studies and ICT implementation checklists.

The preparation of the guide could be done as joint exercise by relevant agencies, such as the Australian Government Information Management Office (AGIMO), the Australian Public Service Commission (APSC), DEWR and DCITA. To assist the development of these guidelines it may be useful to draw on existing telework better practice strategies, including those identified through ATAC research and stakeholder consultations.

### **Commitment from APS Executive Leadership**

Support from the senior executive service for the successful implementation of telework arrangements in the APS workforce is critical. An APS wide telework strategy endorsed by agency heads would provide a strong basis from which to seek the involvement of all agencies and accord it the profile it needs to be effective.

Existing forums such as the Management Advisory Committee (MAC) may provide a useful means to seek senior executive commitment to telework in the context of its broader agenda on managing and maintaining the APS workforce.

### **Pilot Initiatives**

Given the dispersed nature of Australian Government operations, the APS is well positioned to explore the potential costs and benefits of moving work away from the central office environment, including to rural teleworkers, in situations where this is practical. A number of key service delivery agencies, including Centrelink, the Department of Defence, and Customs, already draw on field officers located in isolated areas of Australia.

The development of rural and remote teleworking opportunities are likely to provide economic benefits and improved employment opportunities to drought effected areas. To this end, it may be beneficial to pilot some telework arrangements, including in non-metropolitan locations, with a view toward implementing longer-term models.

## **4.5 Research and Modelling**

To better understand the telework 'state of play' in Australia, and the opportunities of telework uptake, ATAC recommends that the Australian Government support research

into Australian telework trends, and economic modelling into the economic benefits of telework adoption, at a firm, sectoral and macroeconomic level.

The need for further quantitative and qualitative research into emerging Australian telework trends, and further economic modelling to support the promotion of telework to the broader business community was recommended by a number of participant organisations within ATAC. Several stakeholder organisations also supported this recommendation in their written submissions, including Telstra, CPA Australia, and the Office for Women in the Department of Family and Community Services.

Research undertaken by ATAC during the telework review revealed a lack of recent data on telework trends in Australia. Available research was generally dated, and surveys often used divergent definitions for telework and home-based work, making comparisons between different surveys, and the identification of longitudinal telework trends, extremely difficult. To contribute towards the remedy of this situation DCITA funded the *Sensis Insights Teleworking Report*, which included complementary surveys of 1500 workers and 1800 SMEs. An overview of Sensis survey findings is at 5.2 Sensis Insights Telework Report.

In the future it may be sensible policy for the Australian Government to invest more heavily in incentives to promote telework uptake. ATAC considers that in the context of this possibility, Government should direct additional resources at this stage toward the more systematic gathering of telework data, and the development of econometric models to evaluate the impacts and economic benefits of telework.

### Tracking Telework Trends

ATAC recommends that Government fund telework surveys of Australian businesses and employees, to support the development of longitudinal data on telework adoption and usage behaviours. This data would provide a clearer picture of evolving telework trends, and would enable Government to more effectively measure the impact of policy on the labour market.

The *Sensis Insights Teleworking Report* was useful to the ATAC review because it provided a recent and detailed overview of the telework state-of-play in Australia. Based on the original survey template it is estimated that subsequent surveys could be funded at reasonable rates.

The existing Sensis survey template could also be built upon by including additional questions designed to measure telework trends and usage behaviours for a range of other important groups, including workers with disabilities, carers, female workers, and workers living in regional, rural and remote areas.

Additional questions could also be included to identify and measure technological barriers to telework uptake. Alternatively funding could be used to support surveys of identified groups to clarify the potential telework benefits and impacts in targeted areas

of the workforce.

The ATAC also recommends that Government explore the use of other survey vehicles to measure telework trends, including in particular key sectors. For example, Government could support the inclusion of telework questions in an annual APSC *State of the Service* survey, to better understand the status of telework in the APS.

ATAC also recommends that Government fund telework studies and surveys to enrich the qualitative data which is currently available. It would be useful to further explore the benefits and barriers to telework and how organisations and employees implement and experience telework. The studies could also focus on the impact of telework on particular target groups, such as people with caring responsibilities, people with disabilities, mature aged workers and people located in regional and rural areas.

### **Economic Modelling**

ATAC recommends that Government support economic modelling of the current and potential benefits of telework adoption, including at a sectoral and macro-economic level. It is envisaged that these findings could highlight the opportunities of telework uptake to business leaders and government policy makers.

As demonstrated by the findings of the *Sensis Insights Telework Report*, many Australian businesses have already identified a clear business case to support the introduction of telework arrangements. However, there is currently a scarcity of research data relating to the potential cost saving and productivity benefits of telework. If available, this research could be used to promote the utilisation of ICT-enabled flexible working arrangements to the broader business community, including to those who have until now been reluctant to invest in these working practices.

Government should support the identification of telework benefits to businesses through preparation of case-studies on individual firms. This low-cost option could be supported by discussion with telework exemplar organisations, including those identified through the ATAC consultative process. These case-studies might reflect the occupational telework case-studies prepared by DCITA in 2003<sup>61</sup>.

## **4.6 Promoting Benefits of Telework and Telework Better Practice**

A number of stakeholders engaged by ATAC during the consultation process have argued that there is a role for Government in raising public awareness of the benefits of telework, and promoting telework better practice. Stakeholders supporting this view included the Australian Industries Group, Toshiba and Telstra, and international experts, including Bevis England from Telework New Zealand, have argued that there is a role for

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<sup>61</sup> [www.dcita.gov.au/ie/publications/2003/10/broadband/teleworking](http://www.dcita.gov.au/ie/publications/2003/10/broadband/teleworking)

Government in raising public awareness of the benefits of telework, and promoting telework better practice.

Evidence gathered during ATAC consultations suggests that telework is still not seen by many workers and employees as a legitimate and viable working alternative. In addition, negative experiences including those resulting from worker alienation, job fatigue, resentment from co-workers who see telework as a privilege, and inadequate management processes, can potentially cause teleworkers and home-based workers to abandon the arrangement in favour of traditional working practices.

ATAC recommends the Government should endeavour to promote the benefits of telework, and telework better practice, to mainstream industry and SMEs and identified target groups. It is envisaged that information will be identified and potentially prepared by Government, and distributed through seminars and information sessions, and through relevant stakeholder networks.

### **Prepare and Distribute Information**

ATAC recommends that Government support the preparation of materials such as brochures and fact sheets, to inform the workforce on the rights and responsibilities of employers and employees in telework situations. These would be in relation to issues such as OH&S, worker's compensation, privacy, security and insurance coverage.

Government should also support the development and promotion of information relating to telework better practice strategy, including ICT implementation guides and exemplar case-studies. For instance, winners of the ACCI/BCA<sup>62</sup> National Work and Family Awards who demonstrate leadership and innovation in the use of ICT-enabled flexible working practices could provide useful examples of effective telework practices.

It is envisaged that the types of materials prepared for this promotional exercise may share similarities with the content developed for the Online Resource Centre (Recommendation 3), and could be posted on this resource. Government should also post these materials on relevant Departmental websites and disseminate them through existing distribution channels.

### **Support Seminars and Information Sessions**

ATAC recommends that Government support activities that raise awareness of telework related issues and promote aspects of telework better practice strategy to the broader community and to industry. Activities could include seminars, conferences, and information sessions, targeting key groups, such as SMEs, regional and rural businesses, workers with disabilities, carers and mature aged workers.

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<sup>62</sup> Australian Chamber of Commerce and Industry/Business Council of Australia

For example, the Government's Welfare to Work strategies, which seek to encourage employers to employ parents, mature age workers, people with disabilities and long-term unemployed people, could consider promoting the benefits of teleworking.

### **Build Linkages with Stakeholder Networks**

ATAC recommends that Government identify and exploit existing stakeholder networks which tap into communities of interest and which may provide effective channels for the dissemination of relevant materials. These networks may include:

- the Department of Transport and Regional Services' Area Consultative Committee;
- Centrelink offices;
- the Foundation for Australian Agricultural Women;
- relevant vocational educational training organisations;
- industry associations;
- online access centres;
- job network providers;
- state governments; and
- local and regional councils.

## Chapter 5: State of Play and Government Initiatives

Caution is required when comparing telework adoption and usage trends between countries and over time: different surveys typically use different definitions of telework, and measure timeframes differently.

For example, some surveys define telework as being home-based work, while others define it more generally to include all remote and mobile working arrangements. Alternatively, some studies measure telework performed on the day of the survey, while others include telework performed throughout the course of the year. Similarly, some surveys measure telework which occurs on an irregular or occasional basis, while others only measure full-time telework and home-based work arrangements.

Nevertheless, with these caveats in mind, comparison of available data can still provide a general understanding of the current telework situation in Australia, and of the Australian position relative to benchmark countries.

### 5.1 Telework in Australia

Research data suggests that including ICT-enabled flexible working practices is a growing phenomenon in many Australian workplaces. An EMERGENCE Australia 2000 survey found that 12 per cent of Australian businesses have employees who work in locations that are remote to the central business location<sup>63</sup>. A Toshiba Australia 2004 report on workplace attitudes toward flexible working suggested that 38 per cent of Australian organisations have introduced flexible working arrangements, including telework<sup>64</sup>.

Statistical data suggests that many more Australians are also choosing to work from home. For example, the ABS 2002 Australian Social Trends survey estimated that nearly one million workers, including the self-employed, worked from home or had arrangements to do so during June 2000<sup>65</sup>. The 2003 Household, Income and Labour Dynamics in Australia (HILDA) survey estimated that 2.4 million Australians, or 25 per cent of employed people, worked some hours from home<sup>66</sup>. This figure includes the self-employed and employees who had both formal and informal arrangements, such as workers who remain at home when a child is sick or telework undertaken outside of working hours.

ABS data from the Household use of IT survey revealed that between 6 and 8 per cent of wage and salary earners had an agreement with their employer to work from home

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<sup>63</sup> EMERGENCE Australia, *Cities are main eWork magnets in Australia*, 2000. URL: [www.emergence.nu/news/ausreport.html](http://www.emergence.nu/news/ausreport.html).

<sup>64</sup> Toshiba Australia, *Mobility and Mistrust*, September 2004

<sup>65</sup> Australian Bureau of Statistics, *Locations of Work*, June 2000

<sup>66</sup> Household, Income, Labour Dynamics in Australia (HILDA) survey—Wave 3, 2003

between 2000 and 2002<sup>67</sup>. According to the 2000 Location of Work survey, one million employed Australians (11 per cent), worked all or most their hours at home, or had an arrangement to do so. Of these, 62 per cent were employees<sup>68</sup>.

Mobile workers constitute a growing proportion of the Australian population. For example, the IDC Australian Telecommuting Services and Equipment 2004–2008 Forecast and Analysis, identified 2.8 million Australian mobile teleworkers during 2004. IDC estimated that this figure would increase to 3.4 million by 2008<sup>69</sup>.

2000 ABS data shows that 39 per cent of occupations classified as managers and administrators, and 28 per cent of all advanced clerical and service workers, undertook home-based work, to some extent<sup>70</sup>. According to HILDA data, Australian teleworkers were nearly twice as likely to work in the public sector during 2003 (26 per cent of public sector workers worked some hours from home) compared to private sector workers (14 per cent). The HILDA data also confirm that home-based work is prevalent among people employed as managers and administrators<sup>71</sup>.

Knowledge-based industries such as Communications Services, Property and Business Services, Finance and Insurance, and Government Administration and Defence employ a combined total of around one million workers in occupations likely to utilise and benefit from teleworking—this represents an estimated one in 10 of all Australian workers<sup>72</sup>. In addition, these four industry sectors alone contribute one-quarter (25.1 per cent) of Australia's gross domestic product (GDP)<sup>73</sup>.

The Property and Business Services sector is expected to experience the largest jobs growth over the five years to 2009–10, with an average of more than 30 000 new jobs expected to be created each year over this five year period. Other service sectors are also expected to experience significant jobs growth over this period while employment is expected to fall in the Manufacturing sector.<sup>74</sup>

Moreover, recent labour market analysis contained in the Australian Government report *Workforce Tomorrow* has highlighted that Australia faces a potential shortfall of 195 000 workers in the five year period to 2009–10 as a result of population ageing. The Property and Business Services and Finance and Insurance sectors are identified in the report as being at risk of significant employment short-falls over the next five years due to population ageing

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<sup>67</sup> ABS, *Household Use of IT 2000 and Household Use of IT 2001-02*, 10 September 2003.

<sup>68</sup> ABS, *Locations of Work*, June 2000.

<sup>69</sup> IDC Australia (S.Vidal), *Australia Telecommuting Services and Equipment 2004–2008 Forecast and Analysis*, 2004

<sup>70</sup> ABS, *Locations of Work*, June 2000

<sup>71</sup> Household, Income, Labour Dynamics in Australia (HILDA) survey—Wave 3, 2003.

<sup>72</sup> DEWR, *Australian Jobs 2005*, 2005. Pages 7,10 and 13. Excludes for example cleaners, security guards and receptionists from Property and business services.

<sup>73</sup> ABS, *Australian System of National Accounts, 2004–05*, Cat. No. 5204.0. Calculation based on Industry Gross Value Added, chain volume measures, page 23.

<sup>74</sup> DEWR, *Australian Job 2005*, 2005. Page 6–11

The report concludes that there is a need for employers to consider new approaches for creating and maintaining a more diverse workforce.<sup>75</sup> (For further discussion, see ‘Mature age workers’ of the ATAC report.)

### 5.2 Sensis Insights Telework Report

Research undertaken by ATAC revealed a lack of recent data on telework adoption and usage trends in Australia. To contribute towards the remedy of this situation DCITA funded the *Sensis Insights Teleworking Report*, which included complementary surveys of 1500 workers and 1800 SMEs.

The Sensis survey results reveal that a sizeable population of the Australian workforce is already undertaking ICT-enabled flexible working arrangements. Teleworkers are currently employed in professional and knowledge-based industries. A significant proportion work one day a week or less, mainly under informal arrangements, and a majority use traditional technologies, such as PCs and mobile phones to do their jobs.

#### Sensis Business Survey Findings

According to Sensis, 34 per cent of all surveyed SMEs reported that their employees telework to some extent. These adoption levels compare favourably to benchmark countries, including the US which has an uptake rate of 25 per cent, and the European Union (EU) where teleworkers represent 13 per cent of the total workforce<sup>76</sup>. Comparisons of statistics of this kind are difficult to make between countries, the Sensis survey, which includes use of PCs and mobile phones, may be broader than definitions employed by some international surveys. However, data clearly suggests that the telework has a great deal of potential in the Australian context.

According to the Sensis business survey, telework is most frequent in knowledge-based industries, including the business, communications, finance and insurance sectors. Perhaps not surprisingly, telework is less intensive in those occupations that involve manual labour, and which are facilities-based, such as in the construction and manufacturing sectors.

In terms of geographic distribution, teleworkers are most prevalent in the Australian Capital Territory and New South Wales. Telework is also common in Western Australia and the Northern Territory, where remote working arrangements are used to overcome challenges distance. Telework is less common in Tasmania and Victoria. Interestingly, telework uptake levels are broadly similar between metropolitan and non-metropolitan Australia, measured at 35 per cent, and 32 per cent respectively.

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<sup>75</sup> DEWR, *Workforce Tomorrow: Adapting to a more diverse Australian labour market*, 2005. Page 21

<sup>76</sup> SIBIS Pocketbook 2002-3, [www.sibis-eu.org](http://www.sibis-eu.org)

Australian businesses which have taken up telework arrangements appear to be very satisfied with the results. Only 1 per cent reported negative impacts, while 73 per cent of respondents reported positive impacts, with the ability to access information anywhere, along with productivity gains identified as key benefits. It is important to note that an overwhelming proportion of businesses utilise telework arrangements of an informal nature, with only 9 per cent of telework arrangements occurring under formalised agreements.

### **Sensis Consumer Survey Findings**

The findings of the consumer survey support the findings of the business survey. The consumer survey found that 30 per cent of Australian individuals that were employed, either in their own or someone else's business, reported teleworking to some extent. The consumer survey indicates that teleworkers are generally employed on an occasional basis, rather than in full-time working arrangements. Over half of all teleworkers work less than five hours a week, with less than 4 per cent of workers teleworking the full business week.

ICT is essential to telework. Interestingly, broadband Internet (25 per cent) is now utilised by more teleworkers than dial-up Internet (20 per cent). However, it is important to note that older technologies, such as mobile telephones (53 per cent), notebook computers (42 per cent) and stand-alone computers (37 per cent), remain teleworker's preferred tools of choice.

It is perhaps interesting to note that business satisfaction with telework arrangements was markedly higher than employee satisfaction levels. This Sensis telework consumer survey found that while only 1 per cent of businesses reported a negative impact, 13 per cent of employees did. Lack of productivity benefits (42 per cent) and a tendency toward working longer hours (22 per cent) were both identified as negative impacts by employees.

### **5.3 International Telework Trends**

Evidence suggests that telework is an emerging global phenomenon. International IT research firm Gartner Group estimated that there were 137 million teleworkers in the global labour market at the end of 2003<sup>77</sup>. These flexible working arrangements are being driven, in part, by high-speed Internet access. According to Point Topic, 11 per cent of broadband users worldwide teleworked during 2004<sup>78</sup>.

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<sup>77</sup> Work at Home Success, *Work at Home Family Statistics*, [workathomesuccess.com/wahsnews.htm](http://workathomesuccess.com/wahsnews.htm)

<sup>78</sup> Point-topic, Teleworking, 17 November 2004.

## Telework in the United States

Telework is a growing phenomenon in the US. For example, a 2005 ITAC survey estimated that there were 45.1 million home-based teleworkers in the US<sup>79</sup>. This compares to a 2004 survey which identified 24.1 million US teleworkers who worked at least one day per month at home during normal business hours<sup>80</sup>. This 24.1 million figure represented nearly one-fifth of the US workforce (18.3 per cent of employees), 12 million of which constituted full-time teleworkers<sup>81</sup>.

The increasing availability of portable computers and high-speed communication technologies may be, at least in part, contributing to the ability of people to work anywhere. For example, the use of broadband in the home by teleworkers increased by over 60 per cent during the past year resulting in 25.6 million home-based teleworkers with high speed access.

Online technologies are clearly a critical enabler of telework. In 2004, an estimated 93 per cent of US teleworkers were connected to the Internet<sup>82</sup>. The number of broadband enabled teleworkers increased 84 per cent in 2004, up from 4.4 million in 2003<sup>83</sup>. Cable broadband is preferred by 70 per cent of broadband enabled teleworkers (or 6.6 million), with DSL the second most popular (2.9 million)<sup>84</sup>.

In 2004, nearly twice as many US businesses offered part-time teleworking (36 per cent) compared to full-time teleworking (19 per cent)<sup>85</sup>, with US teleworkers averaging one to two days per week working from home (with just under half using a separate home office space)<sup>86</sup>. In 2004, medium sized businesses (100–999 employees) experienced the most growth in teleworking in the US, increasing 57 per cent from 2003<sup>87</sup>.

Another interesting finding from the 2005 ITAC survey was a 30 per cent increase during the past year in employee teleworkers, while self-employed teleworkers decreased by

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<sup>79</sup> [www.workingfromanywhere.org/news/pr100405.htm](http://www.workingfromanywhere.org/news/pr100405.htm)

<sup>80</sup> International Telework Association and Council (ITAC), *Work at home grows in past year by 7.5 per cent in US use of broadband for work at home grows by 84 per cent*, September 2004.

[www.workingfromanywhere.org/news/pr090204.htm](http://www.workingfromanywhere.org/news/pr090204.htm)

<sup>81</sup> T. Kistner, *Mixed messages of telework's future*, Network World. 2 August 2004, Volume 21, Issue 31. (ProQuest Database)

<sup>82</sup> T.Kistner, *Mixed messages of telework's future*, Network World. 2 August 2004, Volume 21, Issue 31. (sourced from In-Stat Market Research (ProQuest Database)

<sup>83</sup> ITAC, *Work at home grows in past year by 7.5% in U.S. Use of broadband for work at home grows by 84 per cent*, September 2004. [www.telecommute.org/news/pr090204.htm](http://www.telecommute.org/news/pr090204.htm)

<sup>84</sup> Slow rollout, limited availability - coupled with better price/performance and triple-play offerings from cable providers - suggests growth of DSL adoption for teleworkers will slow to 2 per cent by 2008.

T.Kistner, *Mixed messages of telework's future*, Network World. 2 August 2004, Volume 21, Issue 31. (ProQuest Database)

<sup>85</sup> [www.ivc.ca/studies/us.html](http://www.ivc.ca/studies/us.html)

<sup>86</sup> Telework Coalition, *Telework Facts*. (undated) (Source: ITAC 1999).

<sup>87</sup> There was no change in the largest firms (over 1000 employees). ITAC, *Work at home grows in past year by 7.5 per cent in US use of broadband for work at home grows by 84 per cent*, September 2004. [www.workingfromanywhere.org/news/pr090204.htm](http://www.workingfromanywhere.org/news/pr090204.htm)

2 per cent. These findings may result from an increasing acceptance by employers toward telework.

### Telework in Europe

According to the European Foundation for the Improvement of Living and Working Conditions, 3.8 per cent of the employed population in the EU ‘usually’ worked from home during 2002. According to the same research, 7.5 per cent of the population ‘sometimes’ worked from home during the same period<sup>88</sup>. The 2002 Statistical Indicators Benchmarking for the Information Society (SIBIS) survey estimated that there were 10 million teleworkers in the EU in 2002, representing 13 per cent of the total workforce. Netherlands had the highest measured incidence of teleworking (26 per cent), followed by Finland and Denmark (both 22 per cent)<sup>89</sup>.

The Netherlands and Sweden have relatively high proportions of home-based teleworkers (9 per cent and 5 per cent respectively). Switzerland, Finland and Germany have high proportions of mobile teleworkers (8 per cent, 6 per cent and 6 per cent respectively). The highest incidences of self-employed home-based telework are in Austria (6 per cent) and Germany (5 per cent)<sup>90</sup>. According to the UK Government’s Office for National Statistics, the number of teleworkers jumped from 921 000 (4 per cent of workers) in 1997 to 1.8 million in 2005 (8 per cent of all workers)<sup>91</sup>. This figure does not include ‘day extenders’.

### 5.4 Australian Government and Private Sector Initiatives

A number of telework trials and initiatives have occurred in Australia during the past decade. State and territory governments have been active in promoting telework through the funding of ‘proof of concept’ telework pilots. More recently, the development of telework checklists and implementation and management guides by businesses, governments and industry groups has added support.

Many state and territory government, including in Queensland, the Northern Territory and New South Wales have explored the benefits and endeavoured to build the business case for telework through investment in pilots and trials. For example, the Northern Territory Office of the Commissioner for Public Employment is currently implementing a telework pilot for 900 public servants, across three Northern Territory government agencies, in an attempt to collect benchmarking data, and identify barriers to effective teleworking practices.

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<sup>88</sup> [www.eurofound.eu.int/ewco/surveys/EU0502SR01/EU0502SR01\\_2.htm](http://www.eurofound.eu.int/ewco/surveys/EU0502SR01/EU0502SR01_2.htm)

<sup>89</sup> Statistical Indicators Benchmarking for the Information Society (SIBIS) Pocketbook, 2002-03. [www.sibis-eu.org](http://www.sibis-eu.org)

<sup>90</sup> Ibid

<sup>91</sup> [www.ivc.ca/studies/European.html](http://www.ivc.ca/studies/European.html)

The NSW RTA established regional tele-centres during 1998 and 1999 in West Gosford, Penrith and Parramatta, in an effort to cut down on commuting times for staff, and to reduce general road congestion. The RTA established teleworking guidelines which covered OH&S and other issues. The tele-centres are on RTA property, cutting down on site establishment costs, which had been identified by project managers as a key potential impediment to a cost-effective telework program.

The Victorian Government has a \$502 million action plan for growth in provincial Victoria, the Moving Forward initiative. The initiative includes a \$150 000 strategy currently being developed to increase the number of telecommuters and home-based businesses<sup>92</sup>. The Strategy will help identify infrastructure and services needed to boost telecommuting and improve operations of home-based businesses while opening up new business opportunities. The Victorian Government has reported that they will work with local councils, regional businesses, communities and industry groups to develop the Strategy.

In April 2004, Toshiba Australia commissioned a survey of 600 managers and employees to explore opinions on flexible working from large companies in Australia and New Zealand. This research informed the development of their report titled 'Mobility and Mistrust'. Toshiba subsequently called on leading business people, management and human resources experts to put together a practical manual called 'A Guide to Creating and Managing a Flexible Workplace' for organisations and individuals interested in adopting flexible work practices. The aim of the guide is to assist organisations to improve business outcomes, such as higher productivity, through successfully implementing flexible work, thereby helping employees to find better work-life balance.<sup>93</sup>

The information and technology sector has always been an early adopter of both technology and telework, as demonstrated by exemplar companies such as Nortel and Gartner. These companies have done well and often shared 'lessons learnt' with interested parties. To build on these experiences, the Australian Computer Society recently established a Work Life Policy Group to examine issues associated with work-life balance and develop a practical policy framework that can be implemented to improve work-life balance and career options in the ICT sector<sup>94</sup>.

In 2004, the Department of Family and Community Services chaired an Australian Government public-sector inter-Departmental committee that aimed to encourage best practice telework across the Australian Public Service. This Committee developed recommendations to support the use of home-based telework, including developing better practice checklists with a focus on the management of ICT to support internal business

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<sup>92</sup>[www.mmv.vic.gov.au/NewsMovingForwardImprovedBroadbandAccessForRegionalAreas14November2005](http://www.mmv.vic.gov.au/NewsMovingForwardImprovedBroadbandAccessForRegionalAreas14November2005)

<sup>93</sup>[www.isd.toshiba.com.au/sig/sigguide.html](http://www.isd.toshiba.com.au/sig/sigguide.html)

<sup>94</sup>Australian Computer Society, Policy Statement on Work Life, February 2005, [www.acs.org.au/acs\\_policies/docs/2005/worklife.pdf](http://www.acs.org.au/acs_policies/docs/2005/worklife.pdf)

processes. AGIMO published these checklists on their website during 2005<sup>95</sup>.

However, while many private sector organisations and public sector agencies have played an important role in the promotion of telework better practice, until now there has been no collective movement toward the development of a collaboration national approach to telework policy. In this context, ATAC represents an important opportunity for the Government and the private sector to share telework experiences and discuss current activities, and to consider strategies to maximise the opportunities and benefits provided by telework for Australian workers.

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<sup>95</sup> [www.agimo.gov.au/practice/delivery/checklists/ict\\_support\\_for\\_telework](http://www.agimo.gov.au/practice/delivery/checklists/ict_support_for_telework)

## Conclusion

ATAC, comprised of private and public sector organisations with significant experience and expertise in ICT-enabled flexible working arrangements, has consulted widely with broader industry, and community and government stakeholders, and analysed a wide range of original and secondary telework research, to better inform its analysis of relevant telework issues, and support the development of policy recommendations.

During the course of the review, ATAC identified a public interest in telework adoption. For example, telework supports business productivity and cost savings, and may help support Australia's competitiveness in the global economy. Telework can also be used to support labour market participation in the context of existing skills shortages, and Australia's ageing population.

Telework also has a wide range of social and community benefits. Telework can improve work–life balance for Australian workers, can reduce environmental impacts associated with work-related commuting, and can improve prospects for government and business continuity in the advent of terrorism, epidemics and natural disaster.

ATAC identifies a clear case for government intervention, to support and accelerate the growing telework trend. The list of ATAC recommendations to Government included in this report have been designed to promote the effective list of telework for Australian business and employees. Recommendations include improved management training and support, the measurement and promotion of teleworking benefits to mainstream industry and identified target groups, dissemination of better practice strategies, and building of technological capacity for ICT-enabled workers.

ATAC believes that this report raises the principal issues associated with telework uptake in Australia, and identifies opportunities for action to ensure effective and measurable increases in telework uptake. It is anticipated that this will directly contribute to enhanced business efficiency and productivity through increased labour force participation, while also providing improved work–life balance for workers.

## ATTACHMENT A

### ATAC Membership

The ATAC included the following representatives:

- **Keith Besgrove**, Department of Communications, Information Technology and the Arts (Co-Chair)
- **John Kovacic**, Department of Employment and Workplace Relations (Co-Chair)
- **Christopher Peters**, Australian Chamber of Commerce and Industry
- **Patrick Callioni**, Australian Government Information Management Office
- **Kerri Russ**, Australian Public Service Commission
- **Rosemary Sinclair**, Australian Telecommunications Users Group
- **Tony Steven**, Council of Small Business Organisations of Australia
- **Michalina Stawyskyj**, Department of Family and Community Services
- **Craig Herbert**, IBM Australia
- **Peter Coroneos**, Internet Industry Association
- **John Kranenburg**, Service Providers Association
- **Mark Whittard**, Toshiba Australia and New Zealand

The ATAC also included representation from the following proxies:

- **Louise McDonough**, Department of Employment and Workplace Relations (Co-Chair)
- **Gerry Stanley**, Australian Chamber of Commerce and Industry
- **Lexie Brans**, Australian Public Service Commission
- **Richard Thwaites**, Australian Telecommunications Users Group
- **Ewan Brown**, Small Enterprise Telecommunications Centre Limited, for Tony Steven, Council of Small Business Organisations of Australia
- **Leslie MacLennan**, Toshiba Australia and New Zealand

## ATTACHMENT B

### Stakeholder Consultations

#### *Public Submissions*

The ATAC Secretariat invited written submissions from members of the public on issues related to telework during April 2005. Issues listed for consideration in the submission invitation included:

- The potential social and economic benefits and disadvantages of telework;
- Cultural, regulatory, technical and/or legal factors that are enabling or preventing telework adoption; and
- Policies and actions that Government could use to encourage the adoption and effective use telework in Australia.

Members of the public that are teleworkers, or who have previously engaged in telework activities, were invited to provide comment on specific issues, including:

- Where do you telework?
- Approximately how many hours per week do you telework?
- What proportion of your working week is spent teleworking?
- What facilities and equipment do you use to telework?
- What facilities and equipment are provided by your employer?
- Has the introduction of teleworking had a positive impact, a negative impact or no real impact on you?

Members of the public that employ teleworkers on a permanent or occasional basis, or who are considering introducing telework arrangements, were invited to provide comment on specific issues, including:

- How many of your employees telework?
- How many of your employees do not telework?
- How many of your employees would like to telework?
- If you do not utilise telework, do you intend to introduce teleworking in your business?
- Do you have formal agreements in place to telework, or is teleworking managed on an informal basis?
- What are the main reasons that employees in your business telework?

- Has the introduction of teleworking had a positive impact, a negative impact or no real impact on your business?

By 10 June 2005, 27 written submissions were received. Formal written representations were lodged by the following people and organisations:

Australian Computer Society;	Juliet Willetts, Institute for Sustainable
Australian Industry Group;	Futures, University of Technology
Bryan Carol;	Sydney;
Building Commission; Citrix;	Kate Haslam;
Cooloola Shire Council;	David Morrell;
CPA Australia;	Angela McGregor, Quality Training
David Petley, Norex;	Solutions;
Diamond, Lafferty, Whitehouse;	Minter Ellison;
the Disability Information and Resource	Andrew Hunter;
Centre SA;	Sally Cripps;
the Foundation for Australian	Standards Australia;
Agricultural Women;	TEDICORE;
Hugh Boyd, Swishzone;	Telstra;
Julie Brown;	Tim Russell; and
John Gundry, Knowlab;	Toshiba.

### *Consultative Forums*

During April, May and June 2005 ATAC hosted a series of public consultation forums for interested stakeholders in locations throughout Australia, including in Sydney, Melbourne, Brisbane, Gold Coast, Longreach and Hobart.

Telework presentations were also held at DCITA on 27 May 2005, and DEWR on 6 June 2005. A whole-of-Government telework consultative forum was held in Canberra on 29 July 2005.

Forums included a formal presentation on the ATAC review from the secretariat, a question and answer session, and included opportunities for forum participants to discuss their own issues and experiences.

Further, the ATAC Secretariat made a presentation on the ATAC telework review process to the TAFE Frontiers Training Flexible Workers Workshop on 17 May, and at the 10 June TAFE Frontiers Virtual Forum. A representative of the secretariat attended the Going Virtual Conference as a keynote speaker on 8–9 September 2005.

### *Stakeholder Meetings*

During May and June the ATAC secretariat met with a number of telework stakeholders located throughout Australia, including in Sydney, Melbourne, Brisbane, Gold Coast,

Hobart, Adelaide, Perth and Darwin.

Representatives of the secretariat also hosted telephone conferences with a number of international teleworking experts, including: Bob Fortier from Canada; and Bevis England and George Lafferty from New Zealand.

### *Site Visits*

ATAC members conducted a site visit to model telework location, the Nortel Innovation Centre, on 20 May 2005.

### *Expert Presentations to ATAC*

Chris Capel, from the Foundation for Australian Agricultural Women, made a presentation to ATAC on her telework experiences and views, including the challenges and opportunities associated with ICT-enabled remote working arrangement for female workers in rural Australia.

Professor Reg Coutts, from Coutts Communications, made a presentation to ATAC on many of the barriers that workers with disabilities currently encounter in the traditional workplace, and provided an overview of benefits that these workers may receive through the further development of telework opportunities.

Ann Moffatt, Dr Neville Meyers and Bevis England participated in a panel discussion to inform ATAC of their views and experiences in relation to relevant telework issues, including those relating to the management and recruitment of teleworkers, telework business drivers, and key lessons learnt from government telework initiatives in New Zealand.

## ATTACHMENT C

# AGIMO—ICT Support for Telework, Better Practice Checklist<sup>96</sup>

### Summary of Checkpoints

#### **Assessment of Requirements**

- Ensure that business drivers rather than simply opportunities offered by emerging technology underpin decisions
- Consider the needs of different types of users
- Consider the flow-on costs of support for teleworkers

#### **Security**

- Express security requirements in business terms
- Make use of available resources
- Be prepared to explore a variety of approaches and solutions

#### **Connectivity and functionality**

- Consider appropriate communication technologies
- Consider the limitations in functionality imposed by communications technologies
- Be explicit with expectations of personal use
- Actively monitor developments in teleworking systems

#### **Equipment**

- Base equipment on user requirements
- Consider limiting the range of different devices to be used for telework in order to limit support costs
- Be aware of support and security issues if staff use their own equipment

#### **Research and Development**

- Connect research and development on telework to the business drivers
- Make contact with other agencies with similar business drivers
- Seek outside advice where necessary

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<sup>96</sup> [www.agimo.gov.au/practice/delivery/checklists/ict\\_support\\_for\\_telework](http://www.agimo.gov.au/practice/delivery/checklists/ict_support_for_telework)

ATTACHMENT D

**Telework Case Studies**

*Case study 1—Longreach, Qld*

Ms Chris Capel is a current board member and past president of the Foundation for Australian Agricultural Women (2003–2005). In 1997, she was the first person in Queensland to telework a Brisbane based public service position from a remote location. She has worked in a variety of roles for state government and voluntary organisations on a part-time basis and now works full-time. Chris currently teleworks her role as Manager of Communication and Information (west region) with the Queensland Department of Primary Industries and Fisheries from her home “Evesham”, 90 km north-west of Longreach.

Chris works from a home-based office, with one day in the central office in Longreach. She has two dedicated phone lines, a laptop for travel and attends face to face meetings and jobs as required. Most of the report writing and project management work is done from home.

There are a number of benefits to teleworking from a regional area. Chris has had the advantage of three paid, interesting jobs off the farm. Chris considers that teleworking provides opportunities for professional development, interaction with a diverse mix of people, peer support and networks and a career path, which workers in rural areas might not otherwise have. The other benefit is employment for the station hand’s wife who is paid as a child carer for Chris’ children while Chris works.

There are also spin off benefits in the form of local work for IT technicians and computer salespeople. In times of drought, telework kept Chris employed and the farm financially viable—it can be used as a positive drought strategy. Telework provides better work–life balance, as Chris can spend more time with family and less time driving. There are also benefits for employers as Chris works more hours than required due to time saved by not driving and preparing for work, and also because she values the opportunity of teleworking.

There are a number of issues related to teleworking in a rural and remote area, separate from general teleworking issues, including difficulties in getting a teleworking job in rural/remote areas and the need for reasonable and reliable telecommunications.

## Case study 2—Nortel

The teleworking program at Nortel has been operating for over 10 years.<sup>97</sup> Around 65 per cent of Nortel's employees take regular advantage of the ability to securely access corporate systems—intranet, email, people directories, business applications—with their laptop PC from somewhere other than a traditional office desk. Approximately 8 per cent of Nortel employees work from home on a permanent, full-time basis.

The results of Nortel's teleworking program, now called mobility program, are:

- an estimated 15 per cent increase in productivity reported by teleworkers;
- increased employee satisfaction, with teleworkers reporting that they are 11 percent more satisfied than the overall employee population;
- teleworking saves approximately \$22 million in annual real estate facility costs;
- approximately \$18 million saved annually on traditional telephony costs for mobile workers when they switched to Voice over IP solutions;
- over 900 wireless LAN access points for in-building roaming with laptop PCs;
- flexible working capabilities that enable business continuity during disruptive events; and
- proactive awareness of teleworking and mobile community with presence management.

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<sup>97</sup> Nortel, 'This is the way, this is Nortel: Teleworking to mobility—over 10 years of evolution at Nortel', 2004 [www.nortel.com/corporate/success/ss\\_stories/collateral/nn110521-122004.pdf](http://www.nortel.com/corporate/success/ss_stories/collateral/nn110521-122004.pdf)

## Teleworking and mobile options at Nortel

### **Home-based—Full-time teleworkers**

- 60 to 100 per cent of time is spent in home office
- Provided desktop, furniture, office equipment
- Requires high-speed access to corporate network

### **Remote access—Road warriors**

- 40 to 80 per cent of time is spent away from primary office (could be at a hotel, Wi-Fi hot spot, onsite drop-in desk)
- Find-me follow-me call management is important
- Requires access to corporate network via multiple options

### **Dedicated onsite office—Part-time workers**

- 20 to 40 per cent of time in home office—evenings, weekends, occasional day at home
- Retains standard dedicated onsite office
- Provided laptop and high-speed access to corporate network

### **Onsite roaming capability—all employees**

- 100 per cent of time when in primary location
- Anyone—software developers, technical support staff—moving between cubicles and collaborative team rooms
- Provided laptops and wireless LAN access

### Case 3—NSW Road Traffic Authority

The NSW Road Traffic Authority (RTA) trialled a telework pilot program for a period of six months in 1993–94, to assess the impact of telework primarily on travel behaviour, productivity and worker satisfaction. Participants teleworked an average of one to two days per week, which allowed for flexibility in the number of days and hours teleworked per week according to work flow and individual circumstances.

To support the telework arrangements, a policy was established and telework agreements drafted to cover conditions of employment, hours of duty, work allocation, occupational health and safety, security of assets, access to the teleworker, home office inspections, the RTAs liability, and teleworkers' responsibilities. The RTA provided the furniture and equipment needed by staff including desks, chairs, PCs, printers, phone/fax machines and modems. Inspections of home offices were also carried out to ensure a safe working environment.

There were a number of positive impacts observed at the end of the telework pilot. With respect to travel, teleworking significantly reduced travel by teleworkers without a significant increase in overall travel by other household members. It also led to reduced stress levels and costs of travel. Teleworking also impacted on self-reported productivity. When teleworkers compared work items or projects of a similar size and complexity, they reported that work items or projects performed under teleworking conditions cost less (30 per cent); were of better quality (35 per cent); and took less time to complete (69 per cent).

The impact on worker satisfaction was overwhelmingly positive as a result of teleworking. The RTA reported that employees were satisfied with increases productivity and quality of work, decreased travel and the number of trips, control of working hours and motivation to continue to telework. Teleworking also provided an opportunity to plan work around family and other activities and enabled teleworkers to experience a less stressed and healthier life style.<sup>98</sup>

The RTA established regional tele-centres during 1998 and 1999 to combat the fears around invisibility of the home-based worker in West Gosford and Penrith, with a few hot desks in Parramatta. NSW RTA tele-centres are on RTA property, cutting down on site establishment costs, which was identified by project managers as a key potential impediment to a cost-effective telework program. Following an evaluation of the West Gosford tele-centre trial, the RTA found that a tele-centre can provide a cost-effective alternative office facility with positive impacts on reducing travel demand, increasing productivity and business efficiency and improving the environment.<sup>99</sup>

<sup>98</sup> NSW RTA, *Teleworking – a flexible working*, Summary report RTA Teleworking Pilot Project 1993/94, [www.rta.nsw.gov.au/trafficinformation/downloads/rta\\_tw.pdf](http://www.rta.nsw.gov.au/trafficinformation/downloads/rta_tw.pdf)

<sup>99</sup> NSW RTA, 'West Gosford Telecentre Trial', 2005. [www.rta.nsw.gov.au/trafficinformation/managingtraveldemand/teleworking/westgosfordtelecentretrial.html](http://www.rta.nsw.gov.au/trafficinformation/managingtraveldemand/teleworking/westgosfordtelecentretrial.html)

The RTA stated that teleworking is particularly suited to information workers and staff who do not have direct face-to-face contact with customers. Teleworking arrangements are available for RTA staff to work from an alternative office location either occasionally or on a regular basis or under special circumstances provided the following conditions are met: work can be completed efficiently and productively; and customer service delivery is maintained.<sup>100</sup>

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<sup>100</sup> NSW RTA, 'About teleworking', 2005.

[www.rta.nsw.gov.au/trafficinformation/managingtraveldemand/teleworking/aboutteleworking.html](http://www.rta.nsw.gov.au/trafficinformation/managingtraveldemand/teleworking/aboutteleworking.html)

## Case 4—Presentation by Shell Australia

At the Victorian TAFE Frontiers workshop on *Training Flexible Workers* in Melbourne on 17 May 2005, Mike Sinclair, Global Director of IT, Shell, delivered a presentation entitled ‘Adapting to a new project delivery model based on *Domicile Principles*’.

Shell has moved from having separate national bases to an international model run on business lines. Globalisation has driven the change in Shell. The types of issues Shell has had to deal with in a post-September 11 environment include working in different time zones, adapting to cultural differences and different hours of work. The down side is excessive travel, lack of work–life balance, isolation, cultural differences, late night teleconferences and lack of face to face interaction.

Mike outlined five principles of a ‘domicile environment’:

1. where work activities do not need to be done locally they are moved to the lowest cost delivery location;
2. work is moved to where resources are located rather than resources moved to where the work is;
3. activities are driven and managed by outcomes/outputs rather than by time;
4. a work location is anywhere (i.e. Shell office, home, airport, hotel, etc) where activities can be undertaken with due concern to health and safety of the individual; and
5. a person’s work hours are driven by project demand rather than by a historic standard.

Virtual working abilities are critical to gain global business. Shell Australia has an office of 250 staff based in Melbourne, with only 120 desks—which means people only come into work to do collaborative work. Email traffic can increase substantially when moving to a virtual work model, so parameters need to be set for communication.

Virtual working changes everything about the way a business workers—it requires a total change program on behaviours, processes, technology and policies and programs. The **behaviours** needed include the ability to build relationships based on trust within geographically dispersed team members and using the technology available to fully utilise the resources of the team. **Processes** need to be in place around cost allocation, communication, knowledge management, project management and training and development. It is important to learn how to effectively use the available **technology** to facilitate virtual working such as virtual teaming, video-conferencing, teleconferencing, instant messaging and net meetings. **Policies and programs** which support virtual work include health and safety policies, workers compensation, country based flexible work policies, technology policies covering broadband, mobile phone and other assistance used at home.

The early outcomes of virtual working for Shell Australia are:

### **The Cost Reduction**

- Reduction in travel costs and allowances
- Lowering of fixed overheads in office accommodation
- Improvements in efficiency in resource usage and removal of lost time through travel, etc
- Lowering of “bench” related to resource requirements/location imbalances.

### **Improved Delivery Capability**

- Reduction in time to delivery by extending project hours across time zone locations
- Ability to leverage scarce resources across geographies
- Having the “right person, available at the right time, from any place”
- Added creativity and innovation through our ability to use diverse resources from different cultural, ethnic and domain backgrounds.

### **Enhanced Employee Value Proposition**

- Significant improvement in work–life balance
- Improved ability to attract talent into Shell
- Enhanced people behaviours facilitated by new work protocols and professional standards.

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## Further information

Department of Communications, Information Technology and the Arts [www.dcita.gov.au](http://www.dcita.gov.au)

Department of Employment and Workplace Relations [www.dewr.gov.au](http://www.dewr.gov.au)

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