

## 10. NON-METROPOLITAN USERS

### 10.1 Overview

The communications needs of residents and businesses outside capital cities are receiving considerable political and other attention. Initiatives such as local call charging to service centres will have an impact on access to online services of remote users. The review of the Standard Telecommunications Service by the Australian Communications Authority (ACA) may influence the level of accepted universal service to accommodate better data transmission. Technology developments, particularly in wireless and satellite infrastructure, are opening up new avenues for servicing remote areas.

Broadly speaking, there are objectives that the

- ◆ range of online services and price to users be reasonably equivalent for non-metropolitan and metropolitan users;
- ◆ particular barriers experienced by non-metropolitan users be removed; and
- ◆ the potential for online services providing particular capacities to meet needs of non-metropolitan users (characterised by a degree of remoteness) be realised.

#### Status

These objectives are being pursued through a combination of market and government initiatives. The 1997 report of the Information Policy Advisory Council "*rural&regional.au/for all*"<sup>1</sup> provides a considered view of the barriers, change and development issues for rural and regional use of online services. It serves as a starting point for monitoring progress. A summary analysis of the recommendations of this report and their current status is included in this section.

The advent of the Regional Telecommunications Infrastructure Fund and its "Networking the Nation" program is having a significant effect in implementing many of the recommendations; its evaluation project will be an important source of information. State Governments have also been active in developing infrastructure availability; and promoting awareness, access and skills development programs.

There is still a lack of equivalence in access to, and use of, services by non-metropolitan and metropolitan users. Some application developments – such as telehealth, and web information services for farmers – are being directed primarily to non-metropolitan users. There may be some evidence that remoteness is being overcome by greater use of online services where these are available.

#### Issues

Access to, and use of, communications services by non-metropolitan users is an ongoing focus of public policy. In practice, outcomes are subject to a mixture of demand, public policy and market forces. The following consideration of a monitoring framework assumes that there are certain public policy objectives, but not that these objectives are met solely through the requirements and incentives of public policy.

#### Ongoing Data Sources and Arrangements

There is relatively little differentiation in publicly available data sources of metropolitan and non-metropolitan access and usage. The ABS is including questions about communications access into its annual Farm Survey, and will have other information available through its regular

<sup>1</sup> Information Policy Advisory Council, *rural&regional.au/for all*, Report of the Working Party investigating the development of online infrastructure and services development in regional and rural Australia, DOCA, 1997

household and small business surveys. The ACA is likely to provide a range of useful information in the report of the inquiry into possible extension of the Standard Telecommunications Service, and may examine ongoing monitoring processes.

There is no clear current host for ongoing monitoring of non-metropolitan aspects; however, this might be formed around the interests of the Department of Primary Industry and Energy, and rural organisations such as the National Farmers Federation/Farmwide.

## Objectives and Indicators

The following sections suggest more detailed objectives of public policy which may be monitored, together with possible indicators and sources of information.

### 10.2 Access to Online Services

Recognising that many of the barriers for non-metropolitan use arise from infrastructure and service availability, where generally speaking this is not the case in metropolitan areas, this dimension is considered as a particular component of access.

Objectives may relate to:	Possible indicators
<p>Infrastructure and Service Availability</p> <p>28.8 kbs modem throughput to all homes</p> <p>Capacity to access basic rate ISDN equivalent - 64 kbps - at comparable rates to metropolitan areas</p> <p>Local call access to ISP POP</p> <p>ISP rates equivalent to metropolitan</p> <p>"Universal reach" of 2 Mbps - availability for videoconferencing, other services, in communities of different sizes</p> <p>Ownership or availability of services by/to individuals, organisations</p>	<p>Incidence of service availability by provincial cities, towns, remote</p> <p><i>ACA is collecting information on PSTN carriage rates for metropolitan./rural/remote users which may be presented in STS report.</i> <i>Farmwide trial information?</i></p> <p><i>Telstra commitment to 96% of households with ISDN access on demand by end 1998 understood to be on schedule</i> Takeup of ISDN connections</p> <p>Progress and outcomes of initiatives such as VicOne Takeup of 2Mbps + connections at schools, libraries, hospitals, other community locations</p> <p>Residential and business access to PCs, Internet - provincial cities, towns, remote <i>(see data below)</i></p> <p>Organisational access to Internet and higher capacity services</p> <p>Public access to PCs, Internet and other services through libraries, schools and telecentres</p>

**Available Data on Ownership/Access**

The following information is obtained from the ABS Household Use survey. Information for small and medium businesses may be available from further analyses of data in the Yellow Pages survey and a recent CIRCIT survey.

This data indicates that there are significant differences in access to computers and the Internet between metropolitan and non-metropolitan households.

Table 10.1 Households With Access to Selected Communications Technologies

	<b>Capital Cities</b>		<b>Rest of Australia</b>	
	Feb 1998	Change From Feb 1996	Feb 1998	Change From Feb 1996
Fixed Telephone	92.3%	-3.5%	93.7%	0.6%
Mobile Phone (any type)	46.2%	72.0%	35.7%	97.2%
Facsimile (any type)	16.0%	65.4%	12.1%	52.2%
Computer	34.8%	17.4%	26.1%	20.9%
Internet Access in Home	15.8%		7.2%	
Intentions of Household to Acquire Internet Access in next 12 months (households with computers and no Internet access)	Y 24.5% N 62.9% DN 12.5%		21.6% 65.5% 12.9%	

Source: ABS, *Household Use of Information Technology*, February 1998, Table 9, 12, 14

**10.3 Use of Online Services**

<b>Objectives may relate to:</b>	<b>Possible indicators</b>
Similar availability in non-metropolitan (to metropolitan) communities of , e.g. Government Business Education Health and other uses of online services	Patterns of use by residential and small business users Local government web presence Small businesses web presence Telehealth use Schools, VET, higher education use Telecentre and library usage Outcomes of programs such as SkillsNet

**Available Data on Use**

Basic usage information for computers and Internet parallel the relationship for access between metropolitan and non-metropolitan users. Other indicators of usage may be able to be obtained, such as the analysis of local government web presence, which shows a considerable difference between urban and non-urban areas.

Table 10.2 Use of some technologies and services by households, individuals, and local government

	Major Urban		Rest of Australia	
	Feb 1998	Change From Feb 1996	Feb 1998	Change From Feb 1996
Households frequently using a computer (a)	39.1%	21.8%	29.1%	24.2%
Internet access by persons over 18 at any location (b)	26.4%		13.3%	
Councils with Web presence(c)	44.6%		12.0%	

Source: (a) ABS, *Household Use of Information Technology*, February 1998, Table 1

(b) ABS, *Use of Internet by Households*, February 1998, Table 4.

(c) CIRCIT analysis of Web presence of local government, June 1998.

(a) differentiates capital cities and rest of Australia; (b) and (c) differentiate all capital cities and major urban centres of 100,000 or more, and rest of Australia

Data on electronic transactions indicates little or no differential between metropolitan and non-metropolitan usage. However, if adjusted for access to services these figures may show some significantly greater usage in non-metropolitan areas, as do the approximate adjusted figures for use of the Internet (although these may be too small for valid comparisons).

Table 10.3 Electronic transactions undertaken by persons aged 18 years and over – by region

Electronic transactions by persons 18 years and over	Total		Capital city		Rest of Australia	
	'000	%	'000	%	'000	%
Paid bills or transferred funds via the Internet	44	0.3	24	0.3	20	0.4
% of those with Internet access (a)		~1.5		~1.0		~3.9
Paid bills or transferred funds via information kiosk	69	0.5	36	0.4	33	0.7
Paid bills or transferred funds via phone	3 929	29.3	2 787	32.3	1 143	23.0
Paid bills or withdrew funds via EFTPOS	7 755	57.8	5 111	59.2	2 644	55.4
Transferred or withdrew funds via ATM	8 858	66.0	5 849	67.7	3 009	63.0

Source: ABS, *Household Use of Information Technology*, February 1998, Table 22. Period covers the 3 months to February 1998

(a) Adjusted figures for Internet access based on ABS, *Use of Internet by Households*, February 1998, Table 4. These figures are approximate as this table differentiates capital cities and major urban centres of 100,000 or more, and rest of Australia

**10.4 Effective Use** Recognising that many of the barriers for non-metropolitan use arise from infrastructure and service availability, where generally speaking this is not the case in metropolitan areas, this dimension is considered as a particular component of access.

Objectives may relate to:	Possible indicators
Particular use of online services to meet needs of non-metropolitan areas	Development of online services to farmers, other remote enterprises: Farmwide, etc.  Development of remote services in health, education, etc.

## 10.5 Change Issues

The analysis of recommendations of the IPAC report (Table 10.5) focuses on a number of change issues which government might particularly address, and the actions which have so far been taken or may be outstanding. While many of the recommendations of this report were directed at infrastructure and service availability, and other access approaches, there was also a significant focus on the awareness and skilling issues required for use and effective use. One regional study, conducted for the WA Wheatbelt Development Commission, suggest that skill development, and examples of the ways communications services can meet needs, are now higher priorities than infrastructure availability and costs.<sup>2</sup>

The following analysis of RTIF funding suggests a significant response to the promotion of use and effective use of online services, as well as infrastructure development.

<sup>2</sup> Beale Telecommunications and Telesis Communications, *Wheatbelt Telecommunications*, prepared for the Wheatbelt Development Commission, December 1997., Ch. 7.

Table 10.4 Indicative analysis of first two rounds of RTIF - Networking the Nation - Funding

Number of projects funded and total funding (\$000s)

	Multi State	ACT	NSW	VIC	QLD	SA	WA	Tas	NT	Total
Planning/Develop	1 200	1 45	8 494.5	3 150	5 49.1	2 167.5	3 75	4 280	3 70	30 1,531.1
Infrastruct - other than online	2 3,435				1 20		1 345			4 3,800
Infrastruct supporting online				1 250		1 507	1 340		1 3,200	3 4,297
Online access	1 5,550		3 513.6	1 610	3 3,728.0	4 1,704.7	1 1,800	1 965		14 14,871.3
Online use	2 270		3 703.9	3 531	2 2,185.1	3 277.5	1 85	3 1,410.8	2 322	19 5,785.3
Online effective use			2 926.4		5 70.5	1 282.3		1 595.5		8 1,874.7
Total	6 9,455	1 45	16 2,638.4	8 1,541	5 6,052.7	11 2,939	7 2,645	8 3,251.3	6 3,592	78 32,159.4

Source: CIRCIT

Table 10.5 Monitoring the IPAC Report – Rural&amp;Regional.Au/For All

(This framework is intended to stimulate response on actions taken and areas to be monitored – references in the two right hand columns are indicative only and require further review)

Recommendation	Outcome required	Subsequent Actions	Aspects to Monitor
<b>Policy/regulatory - general support for development of online services</b>			
1. Govt support online service development	“kickstart” to - stimulate competitive supply of services - bridge gaps between supply side (lack of awareness of potential) and demand side (lack of application readiness)	RTIF established Considerable stimulus to state and local actions	Degree of focus of programs on <ul style="list-style-type: none"> <li>• Stimulus to competitive supply</li> <li>• Bridging of gaps between supply side and demand side</li> </ul>
2. Govt focus on - stimulating demand, and - optimising competitive supply	Competitive supply of services through building demand	RTIF planning/development projects may lead this way Implementation of Telecommunications Act	
21. All specially funded programs and projects appropriately monitored and evaluated		RTIF requirement	
22. Govt support ongoing research and development in online services in areas of - needs assessment - demand analysis - applications development - technology assessment - economic benefits		Not by RTIF	Review approaches of NOIE BTCE RIRDC
23. RTIF Board focus on priorities in this report, with strong priority on partnerships between government, communities and industry			

<b>Recommendation</b>	<b>Outcome required</b>	<b>Subsequent Actions</b>	<b>Aspects to Monitor</b>
<b>Policy/regulatory - support for infrastructure and service availability, access</b>			
3. Govt support for infrastructure should be based on needs and stimulating growth of services and content	Online services and content growth Use for online publishing and communication	RTIF funding profile suggests this approach	
8. Interconnection and access pricing distance and time independent	Flat rate "location independent" pricing for all telecommunications services	ACCC access pricing and related inquiry	
9. Govt strategies to ensure new carrier and service provider entrants, including small regional telcos - through, eg, access to local loop	Aggressive new regional carriers bringing about price and service quality improvements	Section 7.3.153 of Act provides regulatory possibility of regional USO ACCC access pricing inquiry	Development of regional carriers
10. TAF and ACCC give urgent consideration to Internet access as a declared service	Interconnect reflect real costs Equal access to data carriage band network management for all players	ACCC Digital Data Service inquiry	
11. Spectrum allocation processes facilitate maximum innovation and competition; 50% in regional areas guaranteed to new entrants, no hoarding	Easy access to spectrum for innovative players	Spectrum allocation bringing new entrants	
12. Govt implement new USO arrangements to maximise opportunities for competition	Competitive tendering Multiple service provision	Section 7.3.153 provides regulatory possibility of regional USO	Need for guidelines
14. All Australians have affordable access to ISDN equivalent digital connectivity by 2000 - upper price limit roughly equivalent to urban users	↔	STS review by September 1998 Telstra rollout	Outcomes of STS review

<b>Recommendation</b>	<b>Outcome required</b>	<b>Subsequent Actions</b>	<b>Aspects to Monitor</b>
15. Govt monitor price of dial-up local access to online services to ensure affordable and comparable to urban users.	Local call access to Internet	ACA to report	
20. Aggregation of demand to obtain cost efficiencies should ensure all opportunities are pursued to encourage subsequent competition	Competition in context of increased demand		Emerging issue – needs clarification
<b>Use and effective use of online services: Focused on users</b>			
4. Govt specifically support programs of awareness	Programs at national, state or regional level which - assist users to understand and appreciate the relevance of online services to their particular service needs - are responsive to particular cultural and organisational characteristics of different communities	Individual RTIF projects (particularly second round)  Part of telecentres program  NOIE charter/planned regional summits  State initiatives WA Vic SkillsNet	Capability to mount national program based on integration of range of state and other initiatives  What can be learned from these initiatives? <ul style="list-style-type: none"> <li>• Train the trainer rather than whistlestop?</li> <li>• What is the relationship between awareness and ongoing use?</li> </ul>
5. Govt support program to raise awareness of strategic actions to enhance access to, and quality of, online services	Raise awareness amongst regional organisations and community leaders of options	RTIF “planning” projects NOIE – ecommerce summit planned Information Economy day	Approaches to raising strategic awareness, and outcomes
7. Govt support regional services providing training, skills development and help desk facilities, integrated into overall developments	Access for users to training and support services	Some RTIF projects Online access program and state-based programs (WA telecentres, Vic SkillsNet, Tas....)	

<b>Recommendation</b>	<b>Outcome required</b>	<b>Subsequent Actions</b>	<b>Aspects to Monitor</b>
13. Selection by community organisations of technologies, applications and service providers should be based on "best fit" with overall service needs.		RTIF project approvals Rural Communities Program orientation	
16. Govt support regional organisations to - develop action plans to attract commercial service providers - build awareness of advanced communication services - establish partnerships to encourage new applications, services and opportunities - .....	Regional strategies for use of communication services	RTIF focus	
17. Support programs should have key objective of sustainable service outcomes	Survival of supported programs	RTIF guidelines Online Public Access Initiative?	
<b>Focused on content service providers</b>			
18. Govt cooperate with other tiers of govt to promote single window approach	Users have one point of contact for all government services	Online Services Council/GTTC overseeing. Shift in orientation to "multiple entry points"?	Up-to-date view of progress Local government web presence
19. Govt provide incentives to agencies to deliver services online, based on demonstration of client-focused service quality enhancement	Government services online with client focus	State ESD approaches <ul style="list-style-type: none"> <li>• Vic 2001 - Agency performance indicator</li> <li>• NSW connect.nsw strategy?</li> </ul>	
<b>Focused on communications service providers</b>			
6. Target telecommunications industry regarding business opportunities	Established communications organisations and new players aware of niche markets and service possibilities (counter view of low returns)	NOIE?	NOIE and industry forums attention to non-metropolitan opportunities

