

CHAPTER FIVE: COCOS (KEELING) ISLANDS

Commonwealth Legislative Role

5.1 The Cocos (Keeling) Islands became an Australian territory in 1955 and in 1984 the Cocos Malay people voted in an Act of Self Determination for integration into Australia.¹ At the time, the Government made a commitment to raise services and standards of living to comparable mainland levels as soon as possible, but by 1994 at the latest. That agreement was formalised in 1991 by a Memorandum of Understanding signed by the Prime Minister and leaders of the Cocos community.

5.2 Like Christmas Island, in 1992 the Territories Law Reform Act extended nearly all Commonwealth legislation to the Cocos Islands as well as most statutes and common law of Western Australia, the later being applied as Commonwealth law. However, there is still some Western Australian legislation that has not been made applicable to Cocos.

5.3 In 1993 the Grants Commission reported that there had been a decentralisation of service provision away from the Department through its Administrator.² Commonwealth services are to be provided by the relevant Commonwealth agencies that normally provide the services. A similar arrangement exists for state services with these to be provided by the relevant Western Australian authorities acting as agents for the Commonwealth. At the local level, the Cocos (Keeling) Islands Shire Council provides the services. The services are provided in accordance with service delivery arrangements negotiated by the Commonwealth with relevant agencies.

5.4 The Commonwealth Government's objectives for the Cocos Islands are the same as those for Christmas Island:

To align conditions and standards in the IOTs [Indian Ocean Territories] with those of comparable communities in the rest of Australia; to provide residents of the IOTs, over time, with rights, opportunities and responsibilities equal to those of their fellow Australians; to enhance economic development; to protect the natural and cultural heritage in the IOTs; and to deliver government services efficiently, effectively and equitably.³

5.5 The Cocos Islands are part of the Commonwealth Division of the Northern Territory for federal elections.

1 See Table 5.1.

2 Commonwealth Grants Commission, 1993, op. cit., pp. 18-19.

3 *Department of the Environment, Sport and Territories annual report 1996-97*, p. 121.

Table 5.1 Constitutional background on Cocos (Keeling) Islands

Date	Constitutional background
1609	Discovery
1826/27	Settlement on the main atoll formed by and Englishman Alexander Hare and in 1827 Captain John Clunies-Ross (a Scottish seaman and former employee of Hare) settled on another of the islands
1857	Declared part of the British Dominions and administered from London, Ceylon, the Straits Settlements and Singapore
1886	Queen Victoria gave George Clunies-Ross and his heirs freehold title to all lands in the atoll
1955	Sovereignty transferred to Australia leading to non self-governing territory of Australia under the <i>Cocos (Keeling) Islands Act 1955</i>
1978	Australian Government purchased Mr Clunies Ross' property interests in the islands (excluding the family home, Oceania House and surrounding grounds on Home Island)
1979	Cocos (Keeling) Islands Council elected and village area of Home Island transferred to the Council
1984	Cocos Malay people on the Cocos (Keeling) Islands voted in Act of Self Determination for integration into Australia. Decision adopted by United Nations General Assembly
1989	Economic and administrative developments based largely on Memorandum of Understanding entered into by Commonwealth Government, Cocos (Keeling) Islands Council and the Cocos Island Cooperative Society Limited
July 1992	<p><i>Territories Law Reform Act 1992</i> applied all statutes and common law of Western Australia to Cocos as Commonwealth law. Still some Western Australian legislation that have not been made applicable to Cocos. The Cocos community (through their Council) and the Department of Transport and Regional Services have prior notice of the intentions of WA legislative change.</p> <p>Under the <i>Local Government Act 1969 (WA)</i> (CKI) Council changed title to Cocos (Keeling) Islands Shire Council and became responsible for the whole Territory and was given same powers, responsibilities and obligations as a Western Australian shire council.</p> <p>Council performs some functions as agent for the Commonwealth (including some Commonwealth as well as State-type functions) paid for by Commonwealth rather than from local government revenues.</p> <p>Commonwealth tried to 'normalise' the Territory by introducing a State level of activity through the service agreements in place or being negotiated with WA.</p>

Data Source: Commonwealth Grants Commission, *Third report on Cocos (Keeling) Islands inquiry 1993*, Canberra, AGPS, 1993, pp. 1-6.

Postal Services

5.6 Australia Post has handled postal and philatelic functions on Cocos from 1 January 1994.⁴ The Island's postal zone falls within the north Western Australian region 3, with postcode 6799. The Post Offices on West and Home Islands provide postal and philatelic services as well as post boxes. Apparently, there remains no delivery to addressee residences and the Post Offices open for only short periods.

5.7 Postal services are limited to once a week. The service appears to be very unreliable⁵ due to:

- infrequency of the air services and sea services;
- frequent off-loading of airmail due to airfreight constraints/passenger capacity;
- airmail sometimes travels via sea mail which takes 4-6 weeks;
- many items arrive damaged;
- surface/sea mail often stay inside the Post Office for three weeks before dispatching (depending on the availability of airfreight for the mail to go by air)
- urgent documents often do not arrive in time, and
- some mail has occasionally been sent in error to the Pacific (Cook Islands).

Electronic banking

5.8 There is no bank as such on Cocos Island; however there is a Commonwealth agent. Telephone bills are paid through the local post office and social security payments are paid by cheque sent in the mail or straight into customer's accounts. People can cash their cheques or draw money from their accounts from the Commonwealth Bank agency.⁶ The Cocos Islands still have no EFTPOS service. The lack of electronic banking means that business transactions can be delayed for many weeks, largely because of the dependence upon unreliable mail delivery services and clearances required on cheque transactions. Banks on the mainland (Perth) deny their customers any credit on the basis that they do not have mainland real estate (to offer as security), despite the fact that they have two, three or four times the amount they are seeking to borrow as personal wealth in the bank⁷. Some people conduct business banking by phone, by authorizing the bank manager to transfer funds after receiving the client's fax authorizing the funds transfer, but the accountant

4 Previously, postal services on the islands had been the responsibility of the respective territory administrations, Australia Post *Transcripts*, p. 3.

5 Cocos Islands Shire Council, *Submissions*, p. S5.

6 Cocos Islands Shire Council, *Transcripts*, p. 331.

7 Cameron, *Transcripts*, p. 365.

does not support this process. With electronic banking, a 24-day initial lead time could be back to 2-3 days.⁸

Air services

5.9 As with Christmas Island, Cocos is served by one regular Saturday flight and a further flight every second Wednesday.⁹ There was a question raised over the regularity of the second flight. At public hearings, it was revealed that all passenger seats were fully booked on the flights (from August) until December – every weekend, both ways.¹⁰ There was a waiting list of 20 to 30 people. Cocos Island was allocated only 30 seats on any flight, as passengers from Christmas Island had to be accommodated as well. The demand on Apex fares was such that it was necessary to book them five months in advance.¹¹ When a medical emergency occurred (on Cocos or with mainland relatives etc.), negotiations had to occur with the booked passengers to obtain seats. Even where bookings had been made there was no guarantee that seats would be available. This was particularly detrimental to the development of tourism. During school holidays the situation was exacerbated.

There is a couple who just left today for South Australia who paid their airfares three months in advance, were left waitlisted and were then told another \$500 each would get them from Cocos Island to Christmas Island, which was the sector they were waitlisted on. ...

We cannot get tourists on this plane because we cannot book them on the plane. Tourists want confirmation six months in advance. They have paid a lot of money for their holiday; they want to know it is confirmed.¹²

5.10 It was of particular interest to the Business Association and the Cocos Island Cooperative to develop tourism as a source of business and employment on the island. Greater airline capacity would ensure more reliable bookings and provide greater opportunities for tourism, as well as providing greater capacity for mail/freight movements. Cocos has 50-plus beds and the association believed that it would not be difficult to increase the tourist facilities with houseboats and such like; this would be quite a cheap option and easy holiday to sell. At present, the aeroplane does not match the tourist facility.¹³

5.11 The Department of Transport and Regional Services has contracted National Jet to provide a regular weekly Saturday service – understood to be at a subsidy cost of \$20,000 per flight. The National Jet system gains all the revenue from the operation of the aircraft in addition to the \$20,000 from the Department of Transport

8 Cameron, *Transcripts*, p. 365.

9 The plane is the RJ70. Details of its capacity are discussed in the previous chapter. There appeared to be some confusion about whether the plane was an RJ70 or a BAe146. The Committee understands that the BAe146 is an earlier version of the same plane.

10 Cocos Islands Cooperative, *Transcripts*, p. 353.

11 Cocos Islands Cooperative, *Transcripts*, p. 356.

12 Cocos Islands Regional Business Association, *Transcripts*, pp. 368-369.

13 Cocos Islands Regional Business Association, *Transcripts*, p. 369.

and Regional Services. During school holidays, this flight prioritizes passenger movements over freight movements.¹⁴

5.12 In addition, during school holidays, the Department of Transport and Regional Services fully funds an additional Wednesday flight. This additional flight continues (at times on an ad-hoc basis) to provide some catch-up on freight movements. The Department of Transport and Regional Services funds the movement of the aircraft and receives the revenue. This extra flight during school holidays prioritizes freight over passenger movements.¹⁵

5.13 The Committee was told that the Minister for Finance allocated \$1.1 million in 1998-99 for the regular weekly service to the Territories. When this service proved inadequate to maintain supplies and meet passenger demand to the Territories the additional Wednesday flight was introduced at what was believed to be a cost of \$50,000 per rotation. This added another million dollars to the annual cost of the service.

5.14 The Cocos Regional Business Association believed that the solution lay in the contracting of a larger aircraft, such as the 737. The RJ70 (BAe 146) was designed for Europe as a short-haul shuttle craft. It is not designed for long-haul distance flying. However, the 737 series have generally been designed for long-haul flights.¹⁶ It would appear that the number of people brought by one 737 would be similar to the number brought by two BAe 146s. The Cocos Island Cooperative Society expressed a preference for more flights, two regular flights a week on Wednesdays and Saturdays, on the grounds that the additional contact with the mainland would provide greater flexibility.¹⁷

5.15 Existing flights travel from Perth to Christmas and Cocos Islands. The requirements for aircraft to operate from an international port into Australia create difficulties because only an Australian registered aircraft can carry passengers between Cocos and Christmas Islands, and to and from Perth. It is not possible for an international carrier to start a service from the north that might involve Jakarta to Christmas to Cocos, because Australian regulations will not allow them to pick up passengers or freight from Christmas Island and fly them to Cocos Islands.¹⁸

5.16 Full airfares from Cocos Island to Perth are \$1,472 return and \$1,008 if the passenger books well ahead. Given the demand for seats, the cheaper fares are almost impossible to get. 'It is supposed to be [available] if you book 14 days ahead, but not on Cocos. You have to book at least five months ahead to get those airfares'.¹⁹

14 Cocos Islands Regional Business Association, *Transcripts*, p. 367.

15 Cocos Islands Regional Business Association, *Transcripts*, p. 367.

16 Cocos Islands Regional Business Association, *Transcripts*, p. 371.

17 Cocos Island Cooperative *Transcripts*, p. 355.

18 Cocos Islands Regional Business Association, *Transcripts*, p. 371.

19 Cocos Island Cooperative, *Transcripts*, p. 356.

Airfreight costs

5.17 At public hearings the cost of some foodstuffs was drawn to the Committee's attention – lettuces had reached \$11 this year²⁰, particularly because Cocos Island relies solely on the Perth for this service. Also, daily papers are too costly to be given any consideration – 20 copies of the Western Australian newspaper would cost \$9.25 per copy, and 10 copies would be \$10.50 per copy.

Broadcasting*Introduction of digital service*

5.18 With the change to digital services on the OPTUS system in 1998, and the consequent loss of television and radio transmissions from the OPTUS satellite, Telstra facilitated the re-direction of broadcast services via the independent PanAmSat satellite system.²¹ Telstra advised that the change would enable local access to all ABC and SBS radio and television services as well as some commercial networks from the latter part of the year.

5.19 Ground access to the new digital satellites required that communities install new digital receiving equipment. This could be done in a number of ways; either a local organisation could re-transmit broadcasts, or individuals could arrange their own receiving equipment. In the Indian Ocean Territories, it has been left to the Islands' community to arrange local re-transmission of digital services. A new satellite dish and decoder was installed by the Administration in July 1998.

Current services - Radio

5.20 Only very limited radio and television services are available on Cocos unless islanders make private arrangements. One volunteer AM radio station re-transmits ABC Regional Radio. A Perth-based commercial FM station is received by satellite. There is no local re-transmission of ABC Classic FM or Radio National broadcasts. These programs were available from the OPTUS analogue satellite until the recent change by OPTUS to a digital satellite that no longer serves the Island.

5.21 In August 1996, the ABA completed the licence area plan for remote Western Australia within which was included the Christmas and Cocos Islands.²² This involved consultation with the respective Island Administrators for the provision of two new community radio services utilising a free allocation of spectrum. At the time of planning, Island Administrations had made relevant submissions.²³

20 Cocos Islands Regional Business Association, *Transcripts*, p. 378.

21 ABC, *Submissions*, p. S91.

22 ABA, *Transcripts*, p. 230.

23 ABA, *Submissions*, p.S66.

Current services - Television

5.22 The Islands receive ABC, GWN and Australian Television Network (ATN) on Palapa television. The Committee was told at the hearing on Cocos Island that both ABC and GWN were received on West Island. However, on Home Island, ABC, two stations from Indonesia and one from Malaysia were received but GWN could not be accessed without the installation of an extra antenna. SBS could be received, but only at the expense of ABC.²⁴

5.23 The dominant Malay community preferred to watch programs sourced by its own satellite receiver from Indonesia or Malaysia in their own language.²⁵ This equipment accessed the Indonesian Palapa satellite system but was reported to be slowly degrading. In its submission, the Cocos Congress called for Commonwealth assistance to fund an upgrade to the community's receiving system for the Malaysian and Indonesian television services.²⁶ Congress also sought the ability to incorporate local programming, in order to explain issues of importance to the local community. Similar considerations applied to radio services.

5.24 The Committee was informed that small communities could expand their access to television through self-help schemes. Communities form groups, seek assistance with funding - often from shire councils - get a licence from the ABA and finally pay for a satellite dish, satellite receiver, television transmitter and television aerial. The capital cost was in the range of \$10,000 to \$15,000.²⁷ SBS advised that there were probably some 200 to 300 self-help arrangements for SBS by remote communities in Australia.²⁸ As an alternative, small household dishes and domestic decoders could be purchased. Each cost around \$1,500 to \$2,000 to individuals.²⁹

Quality of reception

5.25 The ABC advised that, while picture quality may improve with digitisation, rain and other effects might cause the loss of the signal for longer times.³⁰ As well, WIN Television advised the Committee that:

In the conversations, meetings and discussions we have had to date with the two satellite service providers, neither of them have been able to assure us that they can provide service to the Islands. ... We are aware that they are there probably by fortuitous means. In other words, the signal happens to get there rather more than it is guaranteed to be available there. ... However, in the commercial arrangements that we

24 Cocos Congress, *Transcripts*, p. 336.

25 Cocos Congress, *Submissions*, p. S30.

26 Cocos Congress, *Submissions*, p. S30.

27 SBS, *Transcripts*, p. 218.

28 The separate Broadcasting for Remote Aboriginal Communities (BRAC) scheme provided broadcasting for remote Aboriginal communities using over 100 re-broadcast transmitters.

29 SBS, *Transcripts*, p. 218.

30 ABC, *Transcripts*, p. 217.

are having with the two satellite providers, neither is able to give us a clear, concise guarantee or providing a service to the Islands.³¹

Telecommunications

Current system

5.26 From October 1994, Telstra commenced extension of its telecommunications network to the Islands to give islanders access to services equivalent to those available to remote users on the mainland. Telstra had replaced the original cable network with a fixed AMPS (Analogue Mobile Phone System) system to 312 customers.³² While the fixed AMPS service used the same technology as the mobile equivalent, Telstra charged the normal rates applying for the fixed Public Switched Telephone Network on the mainland.³³ A satellite link provides the telephone lines to and from Australia.

5.27 Work on the upgrade will continue until June 1999, at which time Telstra claims that all Island customers will have access to calling number display, carrier preselection and free call services.³⁴ By then, Telstra will have replaced the fixed AMPS network with conventional PSTN cables and a new telephone exchange and satellite link. Retention of the AMPS network after 2000 will be in accordance with Government policy, noting that some 30 customers have mobile AMPS telephones. OPTUS has provided free calling cards to customers on both island territories as an interim measure.³⁵ Overall approximately \$2 million will have been spent on upgrading the services on the Island.³⁶

Faxing

5.28 At public hearings the Committee was advised that the organisation which runs the travel agency and Commonwealth Bank agency had difficulty with faxes, which were very slow and costly. Fax cost approximately 5c a minute to Perth, and it usually took about 5 minutes to send one page. Travel bookings usually involved 4-5 pages and there were often difficulties sending/receiving the number of pages. The line often dropped out after the second or third page.³⁷

Issues of concern

5.29 The Territories Office, within the Department of Transport and Regional Services, noted in its submission that, given Telstra's inability to meet its preselection

31 WIN, *Transcripts*, p. 263.

32 Telstra, *Submissions*, p. S209.

33 Telstra, *Submissions*, p. S98.

34 Telstra, *Transcripts*, p. 22.

35 OPTUS, *Submissions*, p. S133.

36 Telstra, *Submissions*, p. S209.

37 Cocos Island Cooperative, *Transcripts*, p. 352.

license requirements³⁸ on the Indian Ocean Territories, agreed interim measures applied. This was the package of upgrading works for the Island communities to 'compensate' for Telstra being unable to provide a true preselection option or mainland standards at present.³⁹

5.30 Poor telecommunications placed local business at a disadvantage to those on the mainland due to delays in cheque clearances and payments and service interruptions.⁴⁰ When combined with other factors such as the postal service, then day to day issues taken for granted on the mainland can become matters for complaint on all Islands. The Cocos Shire Council indicated difficulties experienced with Telstra payments. The Cocos Congress stated that STD call charges to the mainland were too high.⁴¹ The Australian Quarantine and Inspection Service noted that without any electronic bank facility, its service levels suffered, although generally communications were adequate.⁴² The Commonwealth noted that the Islands' service providers and employment largely came from Western Australia along with their telephone and radio links.⁴³

Multi-media and the Internet

Current services

5.31 There was no Internet Service Provider on Cocos Island until near the end of this inquiry. However, the small population has few computers available to access the Internet. Customers have the option of accessing a mainland ISP such as Telstra's own ISP, 'Big Pond', but with STD call charges and speeds of either 2.4 kpbs (fixed AMPS) or 9.6 kpbs (cable), the Internet is expensive. It should be noted, however, that from 7pm to midnight the maximum STD fee is \$3, irrespective of the duration of the connection. With the completion of the cable distribution network by June 1999, all customers should be able to achieve access to mainland ISPs, at data speeds of 9.6 kpbs. However, many mainland computer users would regard this rate as too slow.

Government and business use of the Internet

5.32 Inquiry submissions contained various reports of email "drop-out" and loss of connection. The Cocos Shire expressed difficulties with Department of Transport and Regional Services' communications through email.⁴⁴ It claimed that the download of

38 Under the *Telecommunications Act 1997*, Telstra is required to provide Carrier Override and Carrier Preselection. This means that customers have the capacity to select an alternative carrier through dialling a number before the required telephone number. This will not be available in the Indian Ocean Territories until after the recabling and upgrade on the Islands in mid 1999.

39 Department of Transport and Regional Services, *Submissions*, p. S174.

40 Department of Transport and Regional Services, *Submissions*, p. S177.

41 Cocos Islands Shire Council, *Submissions*, p. S4.

42 Australian Quarantine and Inspection Service, *Submissions*, p. S183.

43 Department of Transport and Regional Services, *Transcripts*, p. 166.

44 Cocos Islands Shire Council, *Submissions*, p. S4.

bulk information or graphics had been very difficult and time consuming. It also stated that Internet services were subject to weather conditions. The Cocos Congress reported interruptions due to inclement weather, quite aside from the expensive cost of calls to access an ISP.⁴⁵ The Australian Quarantine and Inspection Service also experienced email difficulties, especially when sending documents as attachments.⁴⁶

5.33 At public hearings, it was revealed that of 30 lines on the island one allocated to the Regional Business Association had just been upgraded to work at 9,6kbps instead of 2.4kbps.⁴⁷ It is still very slow but workable, and they do not have the dropouts as in the old system which caused huge cost increases. It was expected by November 1998 there would be a web site for tourism services on Cocos (Keeling) Islands.⁴⁸ Once the new system was generally available, businesses would be compatible and able to interact with the mainland.⁴⁹ The issue of cost could be monitored as the invoices were sent.

High School use of the Internet

5.34 The school on Cocos Island has 120 students. Approximately 60 children from pre-primary to year six are taught on Home Island; another 60 children, mainly years 7 to 10, are taught on West Island. The majority of children are Cocos Malays who learn English as a second language. Most of those in years 7 to 10 cross the lagoon every day by ferry to attend the school. As on Christmas Island, for schooling beyond year 10, students must go to Perth. In 1998, 14 students would complete year 10 and all were expected to go off the Island for further education. An attempt has been made to offer distance education post year 10 with limited success. There is a language limitation for students to work successfully by correspondence.⁵⁰

5.35 The school is funded by the Commonwealth Government but contracted to the Western Australian Department of Education. It has a curriculum similar to that of Western Australia, although allowances are made for the cultural and language background of the children. The school and the children show signs of geographical isolation; their awareness of the world confined to the islands and the occasional visit to Perth.⁵¹

5.36 It was the view of the school that the Internet offered a most effective tool to overcome that geographic isolation.

45 Cocos Congress *Submissions*, p. S31.

46 Australian Quarantine and Inspections Service, *Submissions*, p. S183.

47 Cocos Island Regional Business Association, *Transcripts*, p. 372

48 Cocos Island Regional Business Association, *Transcripts*, p. 372.

49 Cocos Island Regional Business Association, *Transcripts*, p. 373.

50 Cocos Island District High School, *Transcripts*, p. 360.

51 Cocos (Keeling) District High School, *Transcripts*, p. 357.

We want children to converse with people around the world and on the mainland through email and the Internet. We want them to get information and search around for ideas, to widen their horizons and to give them a sense of being part of Australia and part of the worldwide community.⁵²

5.37 With the new Telstra lines being laid on the island, the speed of the Internet at the school has increased from 4.8kbps to 9.6kbps. Nevertheless, the Cocos Island District High School could not participate in the Western Australian Department of Education Internet programs, which required transmission speeds of at least 28 kbps.⁵³ As far as normal Internet and email access was concerned, a trial for one computer had cost the school \$167 for Internet access and \$477 for STD charges in just one month, more than the \$500 allocated for the trial. The school estimated that two computers, one for each campus, would cost \$13,000 a year. This was not something the school could afford.⁵⁴

5.38 At the public hearings, the Cocos Island District High School made the call for a dedicated band⁵⁵ to be set up from Perth for all of the service providers on the island – including the cooperative, the hospital, the school, the AFP, etc. A quotation received two years ago suggested it would cost \$55,000 a year to lease the communication band, and the setting up would be approximately \$45,000.⁵⁶ Another option is for the satellite links to be upgraded so that everyone on the island can have some sort of reasonable access to the Internet.

5.39 As with Christmas Island, the school expected that within a short time they would be expected to deal with the Education Department in Western Australia electronically on personnel, financial and administrative matters. While the systems were in place, the speed of access was still an inhibition to use for these procedures. The Peoplesoft 2000 package required 28kbps.

Health services and the Internet

5.40 The health service offered on Cocos Island comprised one doctor and at best four community nurses, split between West Island and Home Island. Two Cocos Malay health workers also provide interpreting and translating services as 70 per cent of the Cocos Malay community do not speak English sufficiently to communicate with the doctor without an interpreter. Primary health care is offered: health education, health promotion, disease prevention and early detection. Specialists visited the Island. Paediatric specialists visited every three to six months but other specialities were less predictable. Three to four evacuations occurred each year. Pregnant women were sent off the island either to Christmas Island or to Perth at approximately 36 weeks, as the single doctor was not in a position to deal with

52 Cocos Island District High School, *Transcripts*, p. 358.

53 Cocos Island District High School, *Submissions*, p. S199.

54 Cocos Island District High School, *Transcripts*, p. 358.

55 Cocos (Keeling) District High School, *Transcripts*, p. 359.

56 Cocos (Keeling) District High School, *Transcripts*, p. 359.

complications; he could not perform a caesarean and administer an anaesthetic at the same time.⁵⁷

5.41 The problems experienced on Cocos are similar to those on Christmas Island and the needs for better communications were the same. The doctor on Cocos spoke to the Committee about the competing pressures and stresses on a single practitioner in deciding whether to evacuate a patient at considerable expense (\$35,000 to \$40,000) or to risk complications and treat a patient on the Island. There was a need for access to specialist diagnosis, better medical imaging, especially X-rays, ECGs or ultrasounds, and psychiatric services. All of these are available on the Internet. In addition to medical consultation, medical education was also most readily available through satellite broadcasts which were interactive, allowing the doctor to participate in discussion and ask questions.

Future prospects

5.42 An Integrated Services Digital Network capacity of 64 kbps was currently not available on the Indian Ocean Territories and will not become so even after the network upgrade. According to Telstra, ISDN was not possible using the current satellite link to the mainland due to echo problems.⁵⁸ However, given that an ISDN service operates to the Antarctic over Intelsat, this view appeared rather contradictory. Telstra advised that it was working with several satellite vendors to develop ISDN service via satellite, as long as a suitable space segment and ground footprint existed.

5.43 At public hearings, it was suggested that consideration of a 64k chip on a satellite, costing in the order of \$70,000 to \$75,000 in year one and a continuing cost in the order of \$50,000 to \$60,000 for its continuing availability, would be the appropriate direction in which to head.⁵⁹

5.44 It would appear that Telstra provided conflicting details on the data capacity available. While it stated that only 9.6 kbps service would become available to Island residents, in material provided to Cocos Island District High School it offered 33.6 kbps. However, the Christmas Island ISP and Christmas Island Phosphates each used a 64 kbps ISDN circuit, so they were available. As previously noted, it was a matter for the ACA to determine appropriate standards on circuit capacity such as ISDN.

Recommendation (9)

The Committee recommends that the Department of Communications, Information Technology and the Arts negotiate with Telstra and appropriate banks in order to develop electronic banking/EFTPOS facilities on the Island. (5.8)

57 Indian Ocean Territories Health Services, *Transcripts*, pp. 341-343.

58 Telstra, *Transcripts*, p. 28.

59 Cocos Islands Regional Business Association, *Transcript*, p. 374.

Recommendation (10)

The Committee recommends that the Government assess the best option for providing better Internet connections to Cocos (Keeling) Islands. (5.31 – 5.44)