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JOINT COMMITTEE ON NATIONAL CAPITAL AND
EXTERNAL TERRITORIES

Reference: Communications and the external territories

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**JOINT COMMITTEE ON THE NATIONAL CAPITAL AND EXTERNAL
TERRITORIES**

Thursday, 4 February 1999

Members: Senator McGauran (*Chair*), Senators Allison, Crossin, Lightfoot, Lundy and West and Ms Ellis, Mr Nehl, Mr Neville, Mr Snowdon and Mr Somlyay

Senators and members in attendance: Senators Lundy, McGauran and West, Ms Ellis and Mr Nehl

Terms of reference for the inquiry:

To inquire into and report on communications to and within Australia's External Territories, with particular reference to:

- (1) identifying the elements of a comprehensive and modern communications system required by communities with the characteristics of the External Territories;
- (2) the adequacy of existing services in meeting the communications (being broadcasting, postal, internet and on-line services, and telecommunications) needs of the residents of the External Territories;
- (3) the extent to which communications services available to the residents of the External Territories are of a similar standard to those available in Australia generally; and
- (4) the strategies required to address the future communications needs of the residents of the External Territories, including the costs, the roles of government, the private sector and the communities themselves in addressing those needs.

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Committee met at 1.31 p.m.

CHAIR—Welcome, gentlemen. Now that we have a quorum, I will declare open the meeting of the Joint Standing Committee on the National Capital and External Territories. This is the committee's final public hearing on the inquiry into communications to and within Australia's external territories. In referring the matter to the committee in the new parliament, the Minister for Regional Services, Territories and Local Government noted that we were close to completing the inquiry and aware that residents of the territories had been experiencing a variety of difficulties and challenges which impinge on their ability to have the same access to communications as their fellow citizens in remote areas of Australia and therefore the minister has re-referred the matter to the committee.

Before calling the first witnesses, I remind everyone present that these hearings are proceedings of the parliament and warrant the same respect which the proceedings of the parliament deserve. The committee does not require witnesses to swear an oath or make an affirmation, but that does not diminish the importance of the evidence of this hearing. On behalf of the committee members here I welcome the gentlemen from the Department of Transport and Regional Services. I note you have already have put a submission in to the original committee, so we will just begin by introductions.

LAWLER, Mr Peter Grant, Assistant Director, Indian Ocean Territories, Department of Transport and Regional Services

MAWHINNEY, Mr Vivan Hubert, Director, Pacific Territories, Department of Transport and Regional Services

TURNER, Dr Andrew, Assistant Secretary, Pacific and Indian Ocean Territories branch, Department of Transport and Regional Services

CHAIR—I invite you to make a short opening statement, but at the same time I will ask the first question. In your opening statement can you outline for the committee any changes that have occurred in relation to the communication services to the external territories since we last met.

Dr Turner—Thanks very much, Chairman. I have a brief statement. We appeared on 26 June. We put in a one-page update a week or so ago, or even more recently, which summarises the major changes, but I think it is worth trying to draw out a few of those more significant issues.

When we last appeared on 26 June, I talked about our gratitude for the reference because we have found the issues being examined perplexing over a long period of time, for three reasons. One is the history and geography of the external territories and the importance of communication in what we might call integrating the territories into Australia and the importance of communications in developing what we might call a shared identity.

The second reason is the speed of technological change and our reliance as a department of government on other sources of technical expertise. We are not technical experts in this area. The third is about the frequency of cases of what I then described as market failure in

the provision of services and the importance of identifying and defining publicly funded community service obligations or universal service obligations, whichever term you prefer to use.

The one-page update we provided recently points to some further experience which reinforces the significance of these issues in reviewing communications in the territories. I think it is fair to say that some of the telecommunications examples, we think, go to the heart of providing better illustrations of the issues that we are trying to point out.

Telstra's recent decisions about terminating the analog mobile phone network at the end of the year are probably not news to anybody here. Telecommunications is perhaps the quintessential example of rapid technological change. We certainly are not technical experts in understanding all the technology, so we are not the right people to ask those sorts of technical questions, but we are concerned about the level of service available in the island communities, both from our own operational needs—we have services to provide and people to deal with—and also in terms of the government's name and standards, which we discussed at some length in June.

By the same token, telecommunications is also very important for the shared identity and integration of the external territories. The recent decision by Telstra, we think, is a very good example of the sorts of market failure issues that we tried to outline in June. Essentially, Telstra has made the decision to discontinue the use of the analog mobile phone service from the end of 1999, and that decision extends to the territories exactly as it does to the remote parts of mainland Australia, or whatever parts currently use analog systems.

As we understand Telstra's argument for this decision, they are saying that the support services, maintenance and the like would not be available even if the analog service was maintained in the external territories. That is not an argument that we dispute; we can see the logic of what they are saying. We are aware that the staff of Telstra will be going to the external territories and conducting their own consultations with the local communities, which will be an interesting experience, if nothing else.

As we understand the issue, essentially what Telstra is saying is that the small size of the market in the territories, particularly the Indian Ocean territories, means it is not economic for Telstra to provide the new technology to provide access to the digital service. For individual phones, if individual subscribers were to buy for themselves a phone which will connect to the satellite network, as I understand it that would cost thousands of dollars a time.

So from my point of view that is an example of what we would describe as market failure, but the small size of the communities that we are dealing with means that it is not economic for the service providers; or the service provider has an argument that it is not economic to provide the service. Local residents would be required to make very substantial individual investments in their own technology to maintain the service.

Telstra argue, as I understand it, that there is no community service obligation for which it is funded to provide service to the IOTs. So the issue as we see it, leaving aside all the arguments about whether it is the best technology or whatever, which we are not

challenging, is: is there a community service obligation here and, if so, how is it calculated and to whom is it paid?

As I raised last time, I think in a sense the answer to that question as it applies to the territories, if there is such an answer, might provide something of a model that might apply elsewhere in rural and remote communities.

Similarly, there have been some developments with the RTIF—the regional telecommunications infrastructure fund—which was the subject of a press release by Ministers Fahey and Alston in July, of which I have some copies here. The then minister for territories, Mr Somlyay, also put out a similar press release at around the same time which went to the heart of the significance of telecommunications for the island communities off the coast, inasmuch as it identified what was happening with the sale of the next tranche of Telstra shares. It identified that around about \$20 million would be available for those island communities, not just the territories, but other island communities, from that next sale, which from my point of view, obviously, would be a major significant innovation. Of course, that money will not be available until the Telstra shares are sold.

Issues about funding for the external territories from the sale of the first tranche of Telstra shares are still being debated between ministers. We have not yet identified the external territories in the first sale, but there are discussions going on.

The other area in which some issues are beginning to emerge about the reasonably rapid development since we last met in June is in the whole issue of access to the Internet and use of the Internet. There is now a service provider on Christmas Island. Very recently, I think, a service provider was set up on Cocos Island, so there is some improving access. The technological issues and the issues of cost remain but there is at least some progress.

There are some issues beginning to emerge about regulation of use or access to the Internet, on which we certainly are not experts. We are trying to set up some discussions; or the Department of Communications, Information Technology and the Arts is trying to set up some discussions with us in the near future. I do not fully understand this issue, but it appears there is an emerging problem with how domain names in Internet addresses are applied and registered. It would appear that Christmas and Cocos are appearing as domain names in Internet addresses; in other words, the address where you get dot something, com something or .gov.au. Apparently CI and CKI are being registered as addresses. I do not fully understand the issue but it appears that there is the potential for people to make very large sums of money from registering those names very cheaply and then selling them. As I say, we are not the experts but we are having some discussions with the department of communications. I do not fully understand all the implications of that issue as yet, but that is beginning to emerge.

Mr NEHL—What you were just saying is much the same as obtains in Norfolk Island where a lot of people on mainland Australia are getting addresses at Norfolk. So in Norfolk the same sort of problems are emerging.

Dr Turner—Not fully understanding the issue—it appears to be a similar issue—it is not clear to me how one gets an Internet address registered and how one goes about selling it,

but it does appear that some of the external territories have the potential to be used in that way.

Senator LUNDY—Perhaps by way of explanation, there is an ongoing debate with respect to the government's efforts in try to impose an organisational authority infrastructure for domain names, with the acronym ADNA—Australian Domain Name Authority—and, alternatively, a pre-established independent organisation which is claiming the same role. So this state is occurring concurrently at the moment and the resolution of that will ultimately determine the process by which people can register or purchase domain names. Until that happens it is a bit of a free-for-all. If a popular or lucrative name is registered early on and if someone wants to access that because it reflects their business or reflects their location they can subsequently purchase it. It is like scalping.

Dr Turner—I understand there have been some examples, such as Tuvalu addresses are abbreviated to 'TV' so that no-one can use 'TV' in their domain name address, and so it goes on.

The other area where there have been some developments is in air services. We discussed last time I was here in June the use of government underwriting contracts for air services between Perth and the Indian Ocean territories. There are now two commercial services operating between the Indian Ocean territories and Jakarta and so far they have proven to be financially viable. We understand concerning the air service to Norfolk that one of the companies is having financial difficulties, but that is really a matter between that company and Norfolk Island rather than ourselves. Are there still three providers in Norfolk?

Mr Mawhinney—Two from the mainland and one from Norfolk.

Dr Turner—The level of service provided maintains but we understand that one service provider has had some financial difficulties. That is the major development since June.

CHAIR—I wonder whether you know, as a matter of government policy, the position with regard to GST and the external territories.

Dr Turner—The current position is that we have been advised that the GST will not apply to the external territories, and the government has made public statements to that effect. Beyond that, really, all matters of the GST and other tax are matters for Treasury. The public statements that we have are that it will not apply.

CHAIR—Moving to the matter of air services. Senator West.

Senator WEST—When did the Jakarta to Indian Ocean territories flights start? Was it about September maybe, or even earlier?

Mr Lawler—It was mid to late last year. It would have been probably August or September last year.

Dr Turner—They started off very slowly.

Senator WEST—They were intermittent.

Mr Lawler—They started off almost as a charter type operation and they were flying depending on who was available for flights.

Senator WEST—That is a bit of a dirty word within Australian aviation at present, isn't it—charter type operation?

Dr Turner—That is how they started to operate.

Senator WEST—Not as an RPT?

Dr Turner—No.

Senator WEST—Are they operating as an RPT?

Mr Lawler—They are now.

Senator WEST—How long have they been an RPT?

Mr Lawler—In the last two months they have been issued with what we call AOCs, air operator certificates, to allow a series of flights to commence as an RPT service.

Senator WEST—What was happening before then? Were they operating similarly to what is now being alleged is not the way to be going up in TI?

Mr Lawler—I do not know the details of what is happening in the Torres Strait.

Senator WEST—They were alleging that charterers were offering regular flights and selling tickets as an RPT.

Mr Lawler—They were approved on the basis that they were providing the service that was required from the islands, but they were having to seek approval each time they wanted to fly.

Senator WEST—That is in TI?

Dr Turner—That is how it is operating in the territories.

Senator WEST—How often were they flying then?

Mr Lawler—It started off sporadically with a flight once every two or three weeks and then it came down to once a week. That was when the aviation part of our department and CASA, took more of an interest in what was happening and said that if they were going to want to operate once a week and were offering a series of flights over a period of time, that meant they were potentially an RPT service and had to be registered as such.

Senator WEST—So they have only had an RPT service for about a month?

Mr Lawler—Yes.

Senator WEST—Do you know what the load factors are?

Mr Lawler—Not offhand, but I understand they are fairly viable services.

Senator WEST—Do you know what the costs are?

Mr Lawler—I think they are offering a flight from Christmas Island to Jakarta for about \$400 return.

Senator WEST—If somebody wanted to go from Perth to Christmas Island, given that Christmas and Cocos islands are serviced by the commercial airline that you are subsidising, National Jet Systems, and it was booked out—and it would appear from the evidence that we got in August when we were there, that it is most of the time—what would it cost someone to go from Perth to Jakarta to the territories?

Mr Lawler—The total cost is comparable to the charges on our flights but the convenience factor is not the same. The connections at Jakarta require most people to stay overnight in Jakarta.

Senator WEST—What about the use of those flights for freight—I am thinking particularly of mail—given that they have got that connecting factor?

Mr Lawler—When the services started off, one of them was concentrating on passengers and the other one on freight. Both of them have changed that mix somewhat and they are both carrying passengers and freight now.

Senator WEST—Where is the freight emanating from, is it emanating from Australia? Is it actually having an impact upon Australian companies' ability to source materials to the islands—because the flight is emanating from Jakarta, they are having to send freight to Jakarta?

Mr Lawler—My understanding is that there is a mix of freight coming from both the mainland and South-East Asia.

Senator WEST—But you do not know; you have not got any figures you can give us that indicate that?

Mr Lawler—No.

Senator WEST—With the setting up of this, what has been the impact of those flights through Jakarta on National Jet's traffic passenger load?

Mr Lawler—It is fairly early days yet but what it has done is relieve some of the pressure on those flights, particularly over the Christmas/New Year period where the NJS flights were fully booked. People who wanted to get on at short notice were not able to fly

unless they went through Jakarta. It was the same with freight—it actually allowed some freight to get through that would otherwise have been standing in Perth for quite some time.

Senator WEST—What about mail?

Mr Lawler—My understanding is that mail is still a bit of a problem. I am not too sure of the details why, as yet, but I think it was again during that Christmas period, when the planes were fully booked, that some baggage was not able to get on, and I understand that mail ‘missed the boat’, or plane, a couple of times as well.

Senator WEST—Are you sure it was only a couple of times?

Mr Lawler—The reports that I have—

Senator WEST—Has anyone ever kept a log of how often all of the mail that is destined for Christmas and Cocos Islands has actually made it on the first flight scheduled out, or the next flight scheduled out after it has been posted?

Mr Lawler—Yes, we would probably be able to come up with something that would show what had got on and what had not got on.

Dr Turner—We do not as a matter of routine keep that log but it would be possible by representation to get that information from the freight handlers or from Australia Post.

Senator WEST—Does somebody think it would be a good idea to? Because whenever you go anywhere near the place that is the first complaint they have, and it is an important complaint because things have been lost and things are being held up. We have had evidence from both islands in the Indian Ocean that important medical supplies were being off-loaded because of the lack of capacity. Now, those are the sorts of supplies that Australia Post is hesitant to send. The post office there said to us, I am sure, that Australia Post was hesitant to send to Jakarta if they would have to hang around on a tarmac for 24 hours or 12 hours or overnight or whatever it is before it gets transported off. Has anybody actually kept a decent log? Is there one organisation that is tasked with pulling together all of these waits and delays?

Mr Lawler—A lot of that work would be done out of the Perth office. But I should tell you that since you were on the islands a fair bit of work has been done in consultation with the communities in sorting out these freight priorities on the planes, and mail was not their number one priority; fresh food and vegetables was number one and medical supplies came a close second. Because the plane has a smaller than desired capacity, the hull actually bulks out with passenger baggage before you can get other freight on. So where we can, the fresh food and vegetables are put on, then the medical supplies and that, quite often, will fill the plane.

Senator WEST—We have had evidence from people whose phone services had been cut off by Telstra because the bills had missed the plane and they were not able to get the bill. They knew the bill was coming because their phone had been cut off, but there was no way

they could pay the bill because they did not know what the bill was going to be and they did not have the wherewithal—

Senator LUNDY—They could not ring anybody to tell them.

Senator WEST—No. The banking facilities also do not lend themselves very well to that sort of transfer. I guess there would be some interesting debates going on about what is the highest priority for freight.

Dr Turner—There are indeed, and it is a difficult issue. One of the issues is: is there a single organisation charged with doing all this? As an organisation the last thing we want to do—and what we, in fact, do not do—is run a commercial air service. We would rather not be contracting somebody else to do it on our behalf, either. Our preference would be to have a commercial service to do it, which operated it. So in that sense we are not running a commercial airline but, obviously, we are managing a contract and the people who undertake that contract on our behalf, we are managing their performance so we keep some information.

Mr NEHL—What aircraft are they using?

Mr Lawler—It is a Fokker F27 and a Fokker F28.

Senator WEST—The old HS748 and the Fokker F27 are pretty old technology, aren't they?

Dr Turner—They are both contracted. Part of the issue has been licensing overseas aircraft to operate into Australia, because both the commercial services are provided by Australian based companies but by contracting Indonesian aircraft. The aircraft in both cases are Indonesian aircraft.

Senator WEST—What is the distance between Jakarta and Christmas Island?

Mr Lawler—About 450 kilometres, I think it is. It is about 45 minutes flying time; that is to Christmas Island.

Senator WEST—And Cocos Island is about another hour?

Mr Lawler—Cocos Island is about 980 kilometres from Christmas Island.

Senator WEST—I am not sure that I would want to do that on an F27.

Mr Lawler—Those planes are not actually flying to Cocos Island.

Senator WEST—Being registered overseas, they probably cannot fly on that route.

Dr Turner—At the moment the service is only between Jakarta and Christmas Island.

Senator WEST—But Cocos Island has still only got the once a week service?

Dr Turner—The advantage for Cocos Island is that it brings in freight which can be picked up. When the flight is going on the Perth-Christmas-Cocos route it is able to pick up freight that might not otherwise be there. The capacity of the plane is such that they could not bring that freight up from Christmas because the major passenger load is between Perth and Christmas Island, but they can pick up freight at Christmas Island. So that is the advantage for Cocos Island, that the planes themselves are not directly flying on. Although at least one of the service providers is at least thinking about whether it could organise a commercial service to Cocos Island. At least, they have been discussing that with us.

Senator WEST—I would like to know what CASA has to say about what the requirements are with flying F27s over 800 kilometres of water.

Dr Turner—I do not know whether CASA would approve that—and they may not—so part of the consideration is whether they would need to contract different planes to provide that sort of service and what the economics are of doing that. Those are the things that people are looking at, as I understand it, at the moment.

Senator WEST—The alternates are a hell of a long way away.

Dr Turner—The alternates are back to Jakarta.

Senator WEST—What aircraft is operating the service from Perth to Christmas Island and Cocos Island?

Dr Turner—It is an RJ70, which is a BAe146.

Senator WEST—Looking at what you see in the airline magazines and stuff, the BAe146s—without there being a variant—really has not got the capacity to get from Perth to Christmas Island and Cocos Island and have an alternate without your actually doing some modifications, does it?

Mr Lawler—It does not fly direct to the island. It usually stops at Learmonth for refuelling and then flies on to the islands from there.

Dr Turner—Learmonth is up in the north-west of Western Australia.

Senator WEST—I know where Learmonth is. So it is actually Perth to Learmonth?

Mr Lawler—Yes.

Dr Turner—That is the route that Ansett used to fly. I do not know what the technical requirements are.

Senator WEST—The simple technical requirement—when I looked at the specifications in those air flight magazines that Ansett and Qantas have in their planes—or the specification for a BAe146 falls a fair bit short of the distance from Perth to, particularly, Cocos.

Dr Turner—My understanding is that they have got all the clearances that they need to fly that route; that they are required to land and refuel at Learmonth on the way out but not on the way back.

Senator WEST—Can you take that on notice and give us some notes and details, please, as to what the configurations and specifications are of the RJ70 and where they are actually stopping off and what their alternatives are? If they stopped at Learmonth it would shorten the distance.

Mr NEHL—How big are the planes? We have talked about the BAe146 and RJ70. The RJ70 is a variant. How is it varied? what is the difference?

Mr Lawler—They have done a fair bit of work in terms of the seating of the plane. I think in a BAe146 you will find that there are two seats one side of the aisle and three on the other. Our aircraft has three seats on either side, so they have added more seats to improve the passenger capacity.

Mr NEHL—Sardine airlines.

Dr Turner—Comfort is not what it is.

Mr Lawler—There are another 11 seats.

Mr NEHL—Could I go back to the Indonesian services. Are they doing that just on a commercial hope or are they getting any contracts or subsidies, or what?

Dr Turner—You mean the commercial service?

Mr NEHL—The flights from Jakarta on the F27s.

Dr Turner—They are doing that as a commercial operation under no government subsidies, partly because we are already underwriting a service to Perth but also as a matter of policy—not so much policy, more practice. The government would not underwrite a service between Australia and an international destination.

Mr NEHL—What percentage of the business have they got, both freight and passengers?

Dr Turner—I am not sure that we have done an analysis of that.

Mr Lawler—Off the top of my head, I would say it would be between 5 and 10 per cent.

Mr NEHL—I understand the current contract expires in June this year.

Dr Turner—The current contract with NJS expires in June 2000.

Mr NEHL—That is 18 months away.

Dr Turner—The only funding commitments we have for the current subsidy expire this year but the contract itself expires in June 2000.

Senator WEST—What is happening with the subsidy?

Dr Turner—That is a matter for consideration in the budget context, if the government wants to consider that.

Senator WEST—So on 9 May, or whatever the date for the budget process?

Dr Turner—Absolutely.

Senator WEST—I see. Okay.

CHAIR—Ms Ellis, do you have any questions?

Ms ELLIS—Thank you, Mr Chairman. In a different committee last parliament we did our own inquiry into telemedicine, and I was wondering what would your priority be on the possible provision of telemedicine to the external territories and what options do you think there could possibly be for funding for that sort of health service?

Mr Mawhinney—I know that the Norfolk Island government is interested in that very facility. We visited there with the minister last week and they raised it and he suggested that we explore it further on their behalf and provide that information. I have to say we have not done that yet; we will pursue that in the next few days. That is the position in relation to Norfolk Island. My colleagues would be better placed to talk about Cocos and Christmas islands, but our arrangements there probably include the WA Department of Health.

Dr Turner—The short answer to the question is I really would have to refer that on to the Indian Ocean Territories Health Service, who are, as it were, the professional arrangement that we have. Certainly from our point of view telemedicine is something we are very interested in. We are interested in anything that might cut down the need for medivacs or anything of that sort. Those issues are discussed between the doctors and nurses on the islands and the WA Health Department under the existing service delivery arrangements that we have, rather than necessarily involving us as bureaucrats here in Canberra.

Ms ELLIS—Of course, just as a side comment, the discussion about the level of success and the level of competence of communications links with the territories themselves would also have a very direct bearing on what degree telemedicine could be adopted and how far it could go. In fact, the argument for upgrading of health services via telelinks could actually assist in the upgrading of professional and other sorts of services, because the more fine-tuned the connections are, the further you can go in terms of the use of telemedicine. So there are a couple of different edges that can be considered.

Dr Turner—Indeed, that is a very good example of the interconnection of those arguments I was talking about—in terms of the history and geography of the island; for example, the market is failing because they are small and remote communities—and the

extent to which we apply mainland standards. If the islands are part of Australia, they are part of Australia and they have an expectation of a similar level of service that you would get anywhere else.

Ms ELLIS—In that report that I referred to, which I am sure you are aware of, it would be well worthwhile considering the recommendations and the sort of action under way on mainland remote communities in relation to telemedicine. The wheel has already been invented and there may be ways of collaboration and sharing of knowledge and so on in terms of how they have already connected, because there is some connection going on already in fairly remote areas.

Mr Mawhinney—Certainly the doctors in these remote communities find that some of the procedures they need to perform they perform only rarely, so it would be most useful if they could have access to those facilities. I will chase that up.

Mr NEHL—The department's annual report provides global information. We would be very interested in seeing a break-up into expenditure and subsidies, particularly in health, education, transport and communications for each of the territories.

Mr Mawhinney—Health, education, transport and communications.

Mr NEHL—I do not expect you to trot that out now.

Mr Mawhinney—Thank you very much.

Dr Turner—We might take that one on notice. I will see what we can do.

Mr NEHL—Another issue I would like to raise is that the radio stations in the external territories apparently have particularly old technology and it has been suggested that perhaps redundant equipment from mainland Australia should be provided to be used in the territories. First, is that under consideration; and if it is redundant here, why would we foist it off on to the territories?

Dr Turner—Perhaps if I answer the second part of that it will probably answer the first part. That is precisely the question I would ask: if it is redundant here, why would it not be redundant there as well?

Mr NEHL—I could not see the sense of it.

Dr Turner—The very fact that I asked that question means I am not aware of any active consideration, but that does not mean that the territories' administration themselves are not looking at those issues. I do not know the answer but, certainly if the suggestion was that it would involve some sort of public expenditure, my question would be, why would we export redundant technology just because they happen to be external territories? That does not seem to sit very comfortably.

Mr NEHL—You are not aware of that suggestion?

Dr Turner—I am not aware of it, but I do not wish to imply that does not mean it has not been raised with officers of each of the territories; it is just that I am not aware of it.

CHAIR—Senator Lundy.

Senator LUNDY—Thank you. You mentioned at the start of your submission this afternoon Telstra's requirement that they actually do not have to provide a community service obligation. Can you please clarify that?

Dr Turner—I am reporting on things that are hearsay. As I understand our discussions with Telstra and the department of communications, we have been told that Telstra's view is that it is not funded with any sort of community service obligation to provide a mobile phone service for the external territories. So, in a sense, I am merely reporting on what we have been told.

Senator LUNDY—Is that in relation to the mobile phone network?

Dr Turner—Yes. From our point of view the question is not so much a technological one; we are not technological experts. Our question is really about the community service or universal service obligation which goes to the central issue of: are external territories part of Australia or are they not and, if they are, why does an Australian service provider not have an obligation to provide a service to the external territories?

Senator LUNDY—With respect to access to the Internet on the external territories, currently it seems that the only opportunity is through the main bandwidth channels, either via Telstra or existing satellite opportunities, some of which may diminish, I see from perusing some of these submissions. Have you given much thought as to the impact on competition policy within the external territories of any further limitation on access to bandwidth for Internet services?

Dr Turner—If I say that we have given it some consideration, yes, we are concerned about it but mainly—again without being technical experts in the area—in the sense of the mainland standards and objectives that we have and the fact that the external territories are being left behind and, in a sense, receiving second-rate services, which is purely a function of geography. But, that much said, we are not the people who have the technical answers on how to meld the technology to the geography.

Senator LUNDY—I suppose I was referring to your earlier comments with respect to its not being economic to extend Australia's digital networks into the external territories; and the implication of that is that there is market failure and, therefore, the relevance of competition policy being actively applied is diminished.

What I am trying to find out is if you have actually come to the point where you have investigated the impact of this lack of competition, this market failure, both on costings and access to the Internet and telecommunications, perhaps by seeking advice from the ACCC or looking at it from the specific policy perspective about how you can ensure that the costs are not too high or unfair or otherwise putting the citizens of the external territories at some disadvantage.

Dr Turner—I do not know if, for example, the Norfolk Island government may have taken up some of these issues. I think it is fair to say we have not got to the position of doing the fairly sophisticated analysis that you have just talked about, but we have in the sense that we have got a series of anecdotes about examples of where we think the islands are examples of market failure. Those are constant topics of discussion between us and the Department of Finance, amongst others. That is one of the reasons why this inquiry is valuable for us, because it is raising a particular example of what we see as a generic issue, which is, how do you apply, define and identify community service obligations in examples of market failure in remote parts of Australia?

I do not think we have got the sort of detailed economic analysis or financial analysis that you are talking about but I think we are getting very close to being pushed—if that is the right word—into doing that sort of analysis.

Senator LUNDY—Do you think you are the right people to be doing that sort of analysis? Is that within your scope?

Dr Turner—I think it would be fair comment to say that if an analysis needed to be done as it applies to the external territories then we would have a broad responsibility for doing it, but we would not necessarily have the expertise in-house so we may contract it out, so to speak. That might well be to somebody like the Bureau of Transport Economics or somebody of that nature. We probably would not be doing it ourselves.

Senator LUNDY—With respect to the community service guarantees or universal service obligations that are currently applicable, many of the promised upgradings, particularly the community service guarantees, relate specifically to the next tranche of sale of Telstra funding, which will subsequently fund the RTIF, as it is the banner under which the promises have been made. If the RTIF in fact comes into being upon the success of the passage of the Telstra sale legislation, have you identified and costed what you believe is required to upgrade services to the rest of Australia?

Dr Turner—We have had a number of discussions with the department of communications and Telstra over the past couple of years or so about the issue.

Mr Mawhinney—In respect of Norfolk Island, the first round of RTIF money that we were able to obtain would be used to do the assessment that would give us the estimate of the total cost. So the Norfolk Island government is looking for some financial assistance to undertake the study.

Senator LUNDY—That was \$500,000, was it?

Mr Mawhinney—The latest figure I heard was \$300,000 for the study for Norfolk Island.

Senator LUNDY—With respect to all of these plans being contingent on the availability of RTIF funding, what alternative plans are in place if in fact the RTIF money is not available?

Dr Turner—Given the nature of the commitment that was made in the press release in July, we do not have a contingency plan, other than if and when it becomes a priority we will fund it from existing revenue sources. At the moment our view is that the money will become available in due course from the RTIF and we will use that money when it becomes available.

Senator LUNDY—So all of these plans, in terms of the upgrades that form a reasonably comprehensive part of our inquiry about what comes next, are entirely contingent on the success or failure of the next tranche of the sale of Telstra?

Dr Turner—At the moment that is where we see the government having provided funding from and that is the appropriate source for that funding. If that does not happen then we will concern ourselves with the alternatives when we need to.

Senator LUNDY—Just one final question: with respect to actual Internet access, one of the issues in rural Australia has been the wholesaling of bandwidth to regional ISPs, or Internet service providers. Has the department looked at the comparative cost of the on-selling of that bandwidth to remote citizens, as compared to people in both metropolitan and rural regional Australia?

Dr Turner—We certainly have not. I cannot speak for other parts of either our department or the department of communications. It is possible that our colleagues in the regional services branch may be doing some work on that area, but in the territories branch we have not done that.

Senator LUNDY—Perhaps I should be leaving these question for other witnesses; but there have been some pricing regimes with respect to differentiating between metropolitan, rural and regional customers, particularly through Telstra. Are you aware of where residents of the external territories sit respectively within Telstra's own pricing regime for these services, like Big Pond, for example, which I know applies in Christmas Island?

Dr Turner—We can get that information readily but I do not carry it around in my head. We are aware of those issues but I do not have the information at hand.

Senator LUNDY—Thank you. If you could provide that to the committee, that would be helpful.

CHAIR—That being all, I would like to thank you for coming along. Of course, if there are any matters we need to follow up or additional information, our secretary will be in contact with you.

Dr Turner—Thank you very much for your time.

CHAIR—Thank you very much.

[2.22 p.m.]

ALTER, Mrs Esther, Authority Member, Australian Communications Authority

CAMERON, Mr James, Acting General Manager, Telecommunications, Competition and Consumer Branch, Department of Communications, Information Technology and the Arts

CHEAH, Mr Christopher, General Manager, Regulatory Framework and Bandwidth, Department of Communications, Information Technology and the Arts and National Office for the Information Economy

GREENEY, Mr Robert Scott, Director, Technology, Australian Broadcasting Authority

HART, Dr Beverly, General Manager, Licensed Broadcasting, Department of Communications, Information Technology and the Arts

KELLEHER, Dr Roslyn Ann, Executive Manager, Consumer Affairs, Australian Communications Authority

NEIL, Mr John Brian, Acting Chief General Manager, Telecommunications, Department of Communications, Information Technology and the Arts

ROBERTS, Dr Erica Lucy, Senior Analyst, Regulatory Framework, Department of Communications, Information Technology and the Arts and National Office for the Information Economy

SPENCE, Mr Charles William, Manager, Broadcasting Development, Department of Communications, Information Technology and the Arts

WILLIAMSON, Dr David Hugh, General Manager, Networking the Nation, Department of Communications, Information Technology and the Arts

CHAIR—On behalf of the committee, I welcome you. If you have an opening statement, Dr Hart, I invite you to make it.

Just as a matter of background, we had reached the draft stage of the report when, of course, the election was called and the minister has asked us to start it up again and has resubmitted the reference to this committee. This section that we have invited you to is probably the most technical section; and I, for one, do not pretend to know all things in telecommunications. So our questions, which are somewhat scripted, will very much benefit the information we have and wish to put into the final draft of the report. It will help us tie up some of the recommendations which we were going through this morning. Some questions will be a touch technical but not difficult for you, I am sure.

Therefore, if you do have an opening statement, I would add the question: could you just outline to the committee any developments in the programs in relation to the external territories that have occurred since our last meeting?

Dr Hart—I should explain that we are actually from a range of areas in the department and I look after just one area. There are people here from Telecommunications Division and from the National Office for the Information Economy. What we could just do is run through what has happened since we last talked to you, if that would be helpful.

Perhaps if we could go through in sequence each area of your report in turn, adding to the evidence and the submissions that we made before, just to update what we advised you of back in the middle of last year.

Mr Neil—We have actually provided a paper to the committee which updates the information.

Dr Hart—Thank you, Mr Neil.

CHAIR—If you could go through the update first

Dr Hart—Can you tell us the priority in which these issues come up in the report?

CHAIR—No, it does not make any difference.

Dr Hart—I will start off with broadcasting then. The main development that we discussed with you last time was the transition of remote area broadcasting services from analog to digital and the way that impacted on the territories. We explained that the remote area broadcasting services, known as RABS, were delivered by zonal beams on the Optus satellite; and ABC and SBS had been available on Norfolk Island and GWN and the ABC had been available in the Indian Ocean territories.

Because of that development, the Minister for Communications, Information Technology and the Arts and the Minister for Regional Services, Territories and Local Government had agreed that, as a minimum, following conversion, people on the islands would be able to retain ABC and SBS services. That was because the transition from zonal beams to a national beam meant that it was going to be difficult for people to go on receiving those services because they were on the periphery of the national beam.

In the event though, we were able to say that the minimum position which had been agreed by ministers had in fact been exceeded because it transpired that, following technical tests, people on Norfolk Island were able to receive quite an extensive range of services provided by the Optus B3 satellite, that is, ABC, SBS, TAL and Imparja; and the Christmas and Cocos islands were able to receive the Telstra services being provided by PanAmSat, that is, ABC, SBS and GWN.

Mr Spence—They will have to acquire larger dishes in order to do so; that is how they are able to receive it.

Dr Hart—That is the key.

Mr NEHL—What is the cost?

Mr Spence—We understand that the Indian Ocean territories have already obtained theirs and they were paying a price of about \$25,000 each plus the various installations costs, et cetera. Norfolk is still to advise us of their requirements because they are looking at broadcasting in the overall context of their communications requirements. The cost will be about \$85,000, we understand, somewhere around about that vicinity.

Dr Hart—There has been a range of developments since last year. There has been a second commercial service provided in the west. WIN Television has, in the event, contracted not with Telstra PanAmSat but with Optus, so what we are actually looking at now are ways in which that service can be provided. The minister has actually written to Telstra seeking its cooperation to retransmit the WIN service which will be available on the Optus satellite, on the Telstra satellite so that it can reach the Indian Ocean territories.

Mr NEHL—Which channels would they get?

Dr Hart—The island territories, if they are able to succeed, if Telstra is able to provide that service, will get ABC, SBS, GWN and WIN, but the WIN service is the one that is in doubt at the moment.

Mr NEHL—What does GWN translate to—Channel 7, Channel 10 or Channel 9?

Dr Hart—It has changed just recently.

Senator WEST—I think NQTV comes into it as well.

Dr Hart—That is right.

Mr NEHL—Is it aligned to Channel 9, Channel 7, Channel 10 or one of the others?

Mr Spence—GWN has just changed back to the Seven Network and the other commercial channel in the west, WIN, will pick from Channel 9 and also Channel 10. The other service does not relate directly to that area.

Senator WEST—No, but it relates to the comparison we have had to do between those areas and rural and remote Australia, which is where I am beginning to get NQTV and the loss of the rugby league.

Mr Spence—TAL, the proprietors of QSTV, have moved from a non-exclusive arrangement with the Ten Network to an exclusive arrangement with the Seven Network, which leaves Imparja as the other main operator in that region.

Senator WEST—With Nine.

Mr Spence—There are Channel 9 and Channel 10; Imparja can choose between the Nine and Ten networks at the moment.

Dr Hart—They are in a reversion to the normal affiliation agreements between the networks in the region.

Senator WEST—I think we can batten down the hatches and expect to start getting letters about the rugby league telecast to some remote areas which has now been lost from NQTV.

Mr Spence—I can say that the government is certainly encouraging the broadcasters to cooperate and to roll out their new transmission facilities as soon as possible in remote areas and, in the interim, to try to minimise any sort of temporary loss of programming for viewers. Overall, in the longer term, the fact you will have two commercial services available throughout remote Australia will mean that there will be an overall greater choice from all three networks, plus the ABC and the SBS.

Senator WEST—I will get you to write me a letter so that I can send it out, because I am not going to try to use that argument.

Mr Spence—We are acutely aware that the AFL, the ARL and the cricket should be broadcast nationally.

Senator WEST—So am I.

Mr Spence—We are trying to do what we can to ensure they are received.

Senator WEST—Thank you. That is the main broadcasting authority.

Mr Cameron—As you would be aware, the Telstra transition to full private ownership bill was introduced into parliament in November of last year. That legislation included provision for \$671 million worth of the proceeds of the next tranche to be allocated to various social bonus initiatives.

Of particular interest to this committee is that an individual component of the \$20 million over three years would be applied to the regional telecommunications infrastructure fund for enhancing remote and isolated island communities' telecommunication needs, in particular, Christmas, Cocos (Keeling) and Norfolk islands, as well as a number of other remote islands such as those in the Torres Strait and King, Flinders and Kangaroo islands and the Australian Antarctic territories.

In addition, in relation to some of the matters we included in our initial submission to the committee, there have been a number of developments, in particular in the area of universal service obligation and customer service guarantees which were relevant to the community generally but have application in the Indian Ocean territories. In our last submission we indicated that the minister had then recently approved Telstra's universal service plan, which is the document which specifies how Telstra proposes to comply with its universal service obligation.

The minister recently asked the Australian Communications Authority to conduct a review of the universal service plan by 30 March 1999. Some members of the authority are here. I might just briefly mention that there are some specific areas that they will be considering, including the provision of interim services. Currently Telstra offers to provide interim telecommunications services to consumers who must wait more than 12 months for a

connection and the ACA will assess Telstra's delivery of connections in relation to that interim service.

The review will also specifically look at Telstra's disability equipment program, Telstra's plans in relation to the provision of pay phone services and Telstra's commitments in relation to connection and fault repair times, whether those should be adjusted or changed. In addition, the ACA completed in August of last year a review of whether a digital data capability should be incorporated into the universal service obligation.

The government, in response to that report, announced commitments to include in the universal service obligation a requirement to provide a 64 kbit ISDN service on demand to at least 96 per cent of the Australian population and, for the 4 per cent of the Australian population which does not have access to such a service, to provide a broadly comparable 64 kbit data service using a satellite link which provides for a download of data capabilities at that strength.

In relation to the customer service guarantee, the ACA has also recently completed a review, at the request of the minister, of the customer service guarantee arrangements. The ACA made a number of recommendations in relation to connection and fault repair times including some strengthening of those, as well as amending the definitions in the obligations under the CSG to make it clearer what consumers' rights are and to make those rights more understandable. The ACA also reviewed the proposed changes to ensure that small business customers who have up to five telephone lines would be covered by the CSG arrangements.

The government has announced that it has accepted in broad terms those recommendations, although there may be a short period of delay of the implementation of some of those to allow carriers and service providers to adjust their internal operations in order to meet the new strengthened requirements.

They are the key areas where I think there have been developments in relation to the submission that we had previously put. I might leave my comments at that.

Mr NEHL—Before you move on, could I just ask you in relation to universal service obligation, does that cover Macquarie Island or are there any plans for it to cover Macquarie Island, because it is a part of Australia. It is part of Tasmania, just as Norfolk is part of New South Wales.

Mr Cameron—If it is part of Australia and it is not an external territory then the universal service obligation would apply. I cannot answer on the spot the status of Macquarie Island.

Mr NEHL—I can. It is part of Australia; it is part of Tasmania.

Mrs Alter—If it is part of Tasmania then it is automatically covered by the Telecommunications Act and the USO would apply.

Mr NEHL—The other issue that attracted my attention was that you were talking about the provision of interim services for areas where there would be 12 months delay in providing a service. What are the areas where there is a 12 month delay?

Mrs Alter—In regional and remote areas where access is difficult, when people apply for a connection they have to wait up to 12 months. If after six months they still have not got a connection, they will now be able to get an interim connection via the satellite. For the first three months that would be at a satellite cost and for the next three months it would be at the standard call cost, not at the satellite charging rate.

Mr NEHL—For the first three months it would be at the satellite charging rate?

Mrs Alter—It would be at the satellite charging rate.

Mr NEHL—That applies to regional and remote areas?

Mr Cameron—It applies to remote areas where there is no existing available infrastructure and with populations of below 200.

Mrs Alter—Fewer than 200.

Mr NEHL—What areas are you talking about? There are areas with fewer than 200 in half of the Northern Territory and there would be fewer than 200 in a village outside Coffs Harbour.

Mr Cameron—It relates to particular community areas of fewer than 200.

Mr NEHL—That is what I am trying to ask.

Mr Cameron—An example would be an entirely new farm or station property which may be established somewhere.

Mr NEHL—Or a new mine.

Mr Cameron—Yes, which goes well beyond existing telecommunications infrastructure.

Mrs Alter—It may also be someone in a remote area wanting a fax connection or a data connection, that is still a connection; that could be up in north-west Queensland or somewhere fairly remote.

Mr NEHL—Is that regarded as acceptable, 12 months?

Mr Cameron—That is a matter that the ACA is looking at. That is a decline on the previous connection times.

Mrs Alter—It was 27 months until May 1998, when it was reduced to 12 months. We are currently reviewing that and that review will be completed by the end of March. We will be making recommendations as to connection times for the USO.

Mr NEHL—Thank you.

CHAIR—Anyone else?

Mr NEHL—Before somebody else does, if I may have a second bite at the cherry.

CHAIR—You may.

Mr NEHL—You have spoken of costs for the first three months and then after three months they come back to ordinary rates. If I can just clarify that, what level are the first three months costs at and what do they charge in relation to the second three months?

Mr Cameron—For the first three months the customer would pay the standard satellite service rates which are commercially offered by Telstra. After that three month period the customer would pay the standard rates which would apply to a fixed service had it been installed—that is, the normal STD and local call charge rates—and the carrier would effectively absorb the difference between those costs.

Mr NEHL—How much money are we talking about?

Mr Cameron—It would be difficult to comment without looking at the consumer's particular user requirements.

Mr NEHL—There must be some basis for the comparison. If the usage is X then the standard cost is Y for the first three months and Z for the second three months.

Mr Cameron—I could not give you those figures now but I could certainly come back to you with them.

Mr NEHL—Yes, I would like to have them.

Senator WEST—What happens after 12 months if it has not been put on?

Mrs Alter—After 12 months the customer service guarantee kicks in, if you like, so the customer is entitled to compensation on a daily basis based on their monthly rental, which would be \$11.65 a day. After five days' delay it would kick in at \$40 a day, which is something the government raised in August 1998. That is the compensation that would flow. There is nothing we can do to promote that as it stands.

Mr Cheah—I am currently with the National Office for the Information Economy. The National Office for the Information Economy did not appear before the committee last time around. Since the department last came before you, the office has now joined the department.

I would like to talk about a couple of issues which were brought up by, I think, Senator Lightfoot at the last committee. His main interest in Internet issues seemed to be about domain names and where the authority for domain names came from and whether or not Australia should have the power to do anything about taking over authority for domain names if we chose to do so.

The authority for domain names has traditionally come from the US. There is an organisation called IANA, which is the Internet Assigned Number Authority, which is run out of the University of California and really operates on the basis of agreements between a number of US institutions, military institutions, universities and so on. The organisation IANA has made yearly grants of authority for a country level domain, like the .au domain in Australia and the .ni domain for Norfolk Island to particular individual organisations. It basically has not come from governments at all.

In Australia the government has not regulated domain names historically. At the moment we have a process in Australia for transferring the management of the .au domain from an individual called Robert Elz to another organisation. There is a process under way at the moment where one of the working groups is looking at doing that transfer. The same sort of situation applies in each of the territories as well; there has been a situation where an individual or an organisation has been given the responsibility for managing the domain name in each of the territories. It is likely that, if we wanted to, Australia could ask for the ability to manage that domain name space to be transferred to the Australian government or to another individual if we asked IANA to do so.

At the international level those arrangements have also changed. IANA is now also moving to a more organised way of doing things. There is now an organisation called ICAN which has recently been established do to that. That is the Internet Corporation of Assigned Names and Numbers. That is taking over from IANA. So the US government has set up a process for doing that transfer. That is probably as much as it is useful to say about that topic at the moment.

I think the bottom line is that if Australia wanted to take over the domain name administration in the territories, we could do so, but at the moment we do not get actively involved in interfering in the way domain name space gets administered. That seemed to be the committee's main interest last time. If you have got any further questions, I am happy to address those.

CHAIR—Senator Lundy will have some questions; she will be back soon. Any more opening statements?

Mrs Alter—In relation to the customer service guarantee advertising the Australian Communications Authority has run, relating to the IOTs in November/December we ran a TV campaign so that the residents would be aware of their rights under the customer service guarantee. I understand that has increased awareness of the customer service guarantee, so that they are aware of their connection times and aware of the times by which a fault should be repaired and so on.

Senator WEST—Have you had any feedback or any reaction prompting demand?

Mrs Alter—No. We have measured awareness increase nationally but we have not actually measured the awareness increase specifically on Christmas and Cocos islands.

Senator WEST—You have not found an increase in requests or complaints about faulty service?

Mrs Alter—No, from all reports the consumers there are quite satisfied.

Mr NEHL—Can somebody—I do not mind who—tell me: are both telecommunications and broadcast services delivered by the same satellite platforms? That may seem to you a very basic question but I think we have already intimated that we are pretty much mugs when it comes to technology; speaking for myself.

Mr Greeney—The answer, I believe, is yes, both telecommunications and broadcast services are delivered on the same satellite, on the same platform.

Mr NEHL—The same platform?

Mr Greeney—Yes.

Mr Cameron—We have an open market in telecommunications services. There are a number of satellite platform systems which operate in Australia and those satellite telecommunications services are supplied by means of different satellites. However, there would be a degree of commonality of use of those platforms in some of those areas.

Dr Hart—My understanding is that, during the switch-over to the digital transition and after the introduction of competition in satellite service provision, the government confirmed that people would be able to continue to receive a full suite of broadcasting services, even though you have got two carriers.

Mr NEHL—Is it fair to say that the satellite serving the external territories is inadequate and that this causes some inadequacy in either the broadcast or Internet services available, or does the problem lie with commercial decisions made by the carriers or the broadcasters or the citizens on the islands about how much capacity on the satellites they are prepared to buy?

Mr Spence—On the broadcasting side, certainly when the Optus satellite was operating on an analog basis there was a specific spot across—a zonal beam—across to the Indian Ocean territories and also one to Norfolk. When they took the decision to digitise and to also move to a national beam, I think it is fair to say that the national beam does not provide the sort of coverage that the analog services provided, which was the whole basis for the problems of conversion.

In the case of the Indian Ocean territories they are quite literally beyond the scope of the Optus B3 national beam. Those services to the Indian Ocean territories have now been provided through Telstra. PanAmSat PAS 2 satellite, which is fairly much on the periphery, but enough to get fortuitous reception in there most of the time.

On the Norfolk Island side, as Dr Hart said earlier, the technical studies have indicated that with a larger dish Norfolk should be able to retain its services using the B3 national beam. They have not yet taken up the option and it remains to be seen in practice the quality of the service, but we understand, as far technical studies can tell us, that they should receive adequate reception. In fact, due to the national beam they should get increased services

because the commercial services ought to be potentially available as well as the national broadcasting services.

Dr Hart—A good thing has come out of a bad—in the event the digital switch to a national beam has enabled these communities to get more services than they did before.

Mr NEHL—You did use the word ‘fortuitous’ in terms of reception in the IOT.

Mr Spence—Yes.

Mr NEHL—Does that mean the answer is yes, the service is inadequate?

Mr Spence—We do not have detailed feedback at this stage but certainly it is not within the primary footprint of either of the two main satellites providing broadcasting services to remote areas at the moment, no.

Mr NEHL—That also tends to indicate yes, the service is inadequate.

Mr Spence—We can only get feedback—

Mr NEHL—But the—

Mr Spence—I am not trying to avoid the question, senator.

Mr NEHL—Don’t call me a senator!

Mr Spence—I beg your pardon. Quite seriously, I am not trying to avoid the question but we do not really know the answer until we get detailed feedback from the island territories. But it is certainly not on the primary footprint which means it is fortuitous.

Senator WEST—How do you get the feedback?

Mr Spence—When it has been in operation for a year or so, you can see how the service is received during bad weather, good weather, at various times of the year.

Dr Hart—The technical testing is different from actual operational experience.

Senator WEST—You are doing technical testing there now?

Dr Hart—Yes, there has been technical testing but it is no substitute for actual experience of a range of weather conditions.

Senator WEST—They are in the middle of the wet season now so there must be some indication with all the cloud cover that is over there.

Mr Spence—They are having some problems, I understand, but we have got to wait and see over a full year what the reception is like for the full period. We are not doing technical testing at the moment. The island territories have employed an independent consultant to do

the technical studies and on the basis of that they, in consultation with Telstra, chose to obtain a larger dish which would enable them to get the reception through the Telstra PanAmSat satellite.

Mr NEHL—Do your comments apply to the Internet?

Mr Spence—No.

Mrs Alter—Perhaps I can clarify what happens with the Internet, specially with Christmas and the Cocos islands—not the other territories, because the Telecommunications Act does not cover the others. Part of the USO provides that 96 per cent of the population would get the ISDN equivalent Internet, which is 64 kbit. The 4 per cent, which would include the external territories, which are not getting that, are able to have an asymmetrical satellite link which would give them that download capacity. Part of the USO upgrade which we are looking at in the review is incorporating that and giving some sort of financial kickback to the actual consumers.

The minister, when he tabled the digital data review, said that we were going to upgrade the USO and that if consumers wanted to have their own dish put in, they would get a 50 per cent discount or rebate on establishing their own dish, so that they would then be able to get that 56 or 64 kbit download, rather than the 9.6 that they are getting at the moment.

Mr Cameron—If I could just add to that: in relation to the Internet services, the access to reasonable data speeds is not solely a function of satellite capacity. For the Indian Ocean territories, I understand, Telstra's link between Australia and those territories is primarily via satellite. However, it is also a matter of the actual customer access network and the facilities on the ground. Telstra is undergoing a process of replacing its existing services which are based on an analog mobile phone system with a fixed wire network and that will improve the data speeds available in those territories at that time. In addition, as Mrs Alter mentioned, the upgrade of the USO will provide people in those territories with access to a 64 kbit downlink service as part of the universal service obligation.

In relation to Norfolk Island, the internal telecommunications is a matter for that territory; they are responsible for their own telecommunications services. But they are linked with Australia and with the rest of the world—not solely by satellite services. They, in fact, have cable capacity supplied by Telstra; and in a commercial environment would be able to seek additional capacity through commercial means with the other operators if there were inadequate links via the existing means.

Mr NEHL—How does what you just said fit in with what I believe to be the case; that the cable on the ground only goes up to 9.6? You are saying it has to be higher.

Mr Cameron—The Indian Ocean territories in the past have not been supplied with their telecommunications service by cable, but we will be replacing it with one over time now.

Differing degrees of data speeds are capable over the cable networks, primarily dependent on how far away the customer is from the nearest local exchange. Customers who are relatively close to their local exchange are able to get data speeds sometimes higher than

9.6—28.8, for example. However, that primarily depends on the architecture of the network. However, as we mentioned before, with the upgrade of the USO they will have access to a satellite base 64 kbit service.

Mr NEHL—If you can provide greater bandwidth on the satellite will that improve Internet reception; and, if so, how much will it cost?

Mr Cameron—In relation to the Internet speeds, that would be primarily dependent on whether it is a direct service from the satellite or whether the satellite is essentially the trunk carriage of the communications which then goes into the local ground or terrestrial facilities. In that case it is primarily the terrestrial facilities that will define the speed.

Mr NEHL—So increasing the bandwidth on the satellite will have no beneficial effect unless you have got better coverage on the ground as well?

Mr Cameron—Unless it is a direct connection with a satellite network dish on top of your house, in which case that may well be the case. However, with the upgrade of the universal service obligation Telstra will be required to make available that higher data speed.

Mr NEHL—Does that mean that the additional bandwidth that is available can be or will be utilised?

Mr Cameron—I cannot comment on the existing level of bandwidth on the satellites but certainly we have no indication that there is inadequate capability to meet this upgrade of the universal service obligation.

Mr NEHL—Presumably the alternative satellite delivery to the territories would be cable delivery. I understand there is no cable currently linking Australia to the IOTs. Has the department looked at the cost and feasibility of connecting the IOTs from the—I am not quite certain how to pronounce it—JASUR AUS cable; it sounds like Jurassic Park—and, if so, what would be the cost? Does this represent an alternative to satellite delivery and how do the costs or the quality of cable delivery compare with satellite delivery to the IOTs; and how would they if they had the cable?

Mr Cameron—The Australian regulatory regime places obligations on Telstra, as the universal service provider, to provide certain telecommunications service capabilities, currently standard telephone services and payphones, and there is a proposed upgrade to that. The way in which Telstra meets that obligation is essentially a matter for Telstra. It is a commercial decision whether they consider that would be more effectively provided by satellite or cable facilities. In short, the answer to your question is that it is not a matter that the department has looked at and it is more appropriately an issue for Telstra in its judgment about its compliance with the universal service obligation.

Mr NEHL—Thank you.

CHAIR—I have a question following that: what responsibility for broadcast reception improvements lie with the ABA; what are their responsibilities?

Mr Greeney—Basically our responsibilities are to plan facilities for people who wish to broadcast. We are not funded to provide any broadcasting facilities. It becomes then a question of source of program material. That is the nub of the questions which we have been discussing, as to what quality of signal is available from the satellites that provide the services. As far as the Indian Ocean territories are concerned, we have made provision for retransmissions in those localities in our licence area planning.

CHAIR—So the quality of reception is varied.

Mr Greeney—The quality of reception for the ABC and for the SBS where the National Transmission Agency has provided transmission facilities, government funded, is a matter for the transmission agency. As far as the ABA is concerned we do not have a role in providing the actual service. We facilitate the provision of the service but it is up to the broadcasters to provide that service. What I did say was that in terms of quality of reception, you have got to have a good input signal for retransmission; and that has been the question so far about what is the quality of the input signal which is coming off the satellite or satellites.

Senator WEST—Referring back the ACA, you were talking about the subsidies and such for satellite dishes in the IOTs. What is the cost of installing a satellite dish? What would be the cost for someone in the Indian Ocean territories?

Mrs Alter—I would have to take that on notice, Senator, and get back to you with an accurate figure.

Senator WEST—You said the subsidy is 50 per cent; is it 50 per cent of \$100 or 50 per cent of \$10,000? It makes a lot of difference.

Mrs Alter—It would be between \$400 and \$600, I would estimate. I can get back to you on that.

Senator WEST—I would appreciate that. Mr Spence, you talked about the Telstra satellite being used to get into the Indian Ocean territories. What is the length of the life expectancy of that satellite?

Mr Spence—Telstra is leasing capacity on the PanAmSat PAS 2 satellite. I do not know offhand what the life of the satellite is. I know that you are talking to Telstra next and they can probably provide that information, I suspect. I do not know offhand the life expectancy. It is not imminent, put it that way, but I do not know the exact life of type.

Mr Neil—PanAmSat is an American satellite carrier which usually installs satellites progressively to maintain continuing access. As PAS 2 phases out they will probably replace it with something.

Mr Greeney—I can add to that. The PAS 8 satellite has been launched and it has similar coverage to PAS 2.

Senator WEST—Similar or maybe better?

Mr Greeney—I am not exactly sure but I can say similar. The number indicates it is a later generation satellite. For the period the two are both flying it will obviously have a lot of capacity but at some stage PAS 2 will die and PAS 8 will have to take over.

Senator WEST—That concern was expressed to us; that they were not sure how long that satellite would be available for use.

Mr Greeney—PAS 2?

Senator WEST—Yes.

Mr Greeney—There was an indication when the Optus ACE satellites were launched that they have a lifetime of 10 years and they were replaced with the B3 series satellites which have a lifetime of 13 years. I am not exactly sure when PAS 2 was launched but it would have had a lifetime of around 10 years.

Dr Hart—I am not sure whether this would have been covered in the Telstra contractual arrangements.

Senator WEST—You say the satellite that has gone up is a similar one but slightly better; they may be better off looking at that.

Mr Cheah—There are other satellites around as well; there are PanAmSat satellites and other satellites as well and they are always going up in the Pacific region, so there could very well be other options open to them, either now or further down the track.

Senator WEST—Thank you.

CHAIR—Have Telstra made a claim for compensation for losses incurred for supplying the USO and, if so, how much?

Dr Kelleher—Telstra have put a claim in and the claim was received by the ACA on 28 September. The claim is currently being assessed. Under our legislation we are not to provide details to the public of that claim until after the claim has been assessed. So I am in a bit of an awkward position, I have to admit, in terms of being able to answer that question.

Senator WEST—Given that you have had their claim since September and it is now February, when are you going to resolve it?

Dr Kelleher—The legislation provides that we have basically until the end of March to do the assessment. The minister has indicated to us that he wants to ensure that we do a full consultation and detailed assessment of the claim. We are anticipating that we will be unlikely to complete the assessment by the end of March but we are confident that we will have it done by the end of June.

Senator WEST—So it will be nine months at least before Telstra gets any of this compensation?

Dr Kelleher—Yes.

Senator WEST—And until that time they have to foot the bill?

Dr Kelleher—They will fund the universal service obligation completely. The Telstra share of the universal service obligation is around about the 85 per cent mark, so that they will, in any case, meet around 85 per cent of the cost.

Mr Cameron—If I could just add to that: under the Telecommunications Act the declared universal service provider, which is currently Telstra, is obliged to meet its obligations and on an annual basis there is a process of a claim for the costs incurred in the previous financial year—an assessment of that; and then, as Dr Kelleher mentioned, there is a process of those costs being shared across the industry as a proportion essentially of their market share, so that is an annual process which occurs. However, Telstra continues to be obliged to meet its obligations during that process.

Senator WEST—If it is going to take nine months every year to—

Mr NEHL—It is starting over a year late. The claim that was put in in September last year was for 1997/98, so it is a year late.

Dr Kelleher—Yes.

Senator WEST—It will be a full year later before Telstra get their compensation, if they get any?

Dr Kelleher—We are talking about a rolling arrangement, so every year Telstra does receive compensation. It is a lagged payment but the payments still occur on a yearly basis.

Mr NEHL—What was the last payment?

Dr Kelleher—The last amount was \$251.3 million or something in that order in relation to the previous year.

Senator WEST—It is not exactly chicken feed.

Mr Neil—Bear in mind that Telstra does not get \$251 million, it gets 15 per cent. It is not big bickies for Telstra.

Senator WEST—I will let you tell Telstra that.

Senator LUNDY—Following up on that point, in terms of the information Telstra provides to you to allow that assessment to take place, it is my understanding that previously there was no distinction between their calculations for the USO between the states and the external territories. Is that the explanation for this subsequent delay, or are you in fact on track in terms of your assessment?

Dr Kelleher—No, not at all. The Telstra claim does in fact separate out the external territories from the states, so that problem has been overcome and we anticipated that it would be in this year's claim. Really it is a matter of the process assessment and the complexity of the assessment that it has taken so long to complete.

We are in the process now where we have engaged a number of consultants to provide advice on things like forward looking technology and the cost of capital. We are consulting with the carriers, not just Telstra but all the other carriers, who will be obliged to participate and make a payment towards the levy. So it is a fairly demanding and complicated process and one which will take a fair amount of time to complete properly.

Senator LUNDY—One of the issues raised by previous witnesses is the notion that, because it is an expensive place to deliver telecommunications and Internet services to, the application of competition policy under what the government proposes is not in fact working and improvements in services in these areas can only really be brought about by government support, government subsidisation or application of universal obligations and CSGs. Can you just comment on that?

Mrs Alter—Perhaps you are talking about the preselection that does not exist on Cocos and Christmas islands and the ACA has granted an exemption to Telstra for those two islands. That exemption will expire at the end of June 1999.

Senator LUNDY—That was the one that was extended?

Mrs Alter—It was extended because they are currently building the exchange system that Mr Cameron referred to in your absence. Those exchanges for new cable connections will be completed then, so they will then be able to preselect other carriers, so you will have the element of competition for those territories.

Senator LUNDY—Can you just explain to me in terms of the legislative requirements for both the USOs and CSGs, what is the distinction in relation to the external territories, or the Indian Ocean territories in particular?

Mrs Alter—They are two different things. The customer service guarantee guarantees a certain level of standard, a minimum standard for specifying connection times, fault times and appointment times, that anyone anywhere in Australia is entitled to. The USO obligation is the cost structure for areas that will lose money that will be reimbursed, so that everyone is provided with a standard telephone service. They are two totally different concepts.

Mr Cameron—If I can just add to that: the application of the CSG and the USO are the same for the mainland, all states and territories of Australia, as well as the Indian Ocean territories. In relation to connections and fault repair times there are distinctions across Australia in relation to urban and regional and remote areas and those distinctions are applied equally to the Indian Ocean territories as they are to the rest of Australia.

Senator LUNDY—So the distinction for the customer service guarantees in those territories relate to what, their equivalent remote locations on the mainland, or do they have their own system?

Dr Kelleher—The local infrastructure depends on the population. If you are in metropolitan Melbourne, you are close to infrastructure.

Senator LUNDY—I appreciate that. I am trying to get a feel for what is the point of distinction.

Dr Kelleher—The CSG time frames and the USO time frames are identical.

Senator LUNDY—To what?

Dr Kelleher—To each other. So there is no confusion or no contradiction between having to deliver service against a CSG, which provides compensation, or having to deliver service against a USO, which stipulates the time frame in which the service should be provided. Basically what the CSG does is provide a compensation mechanism where those time frames are not met. But indeed the time frames are the same.

Senator LUNDY—With respect to Telstra's obligations, particularly under the CSGs, the proposals put forward by the government—and I am referring to previous press releases from Ministers Somlyay and Alston—indicate that the next tranche of the sale of Telstra will bring with it a series of funding allocations to the RTIF that will allow future expansion of the CSGs and indeed special projects for the external territories. Have you done any analysis as to how far these commitments or these promises will actually extend or improve either USO or CSG standards?

Mr Cameron—That is possibly a question that Dr Williamson can address.

Dr Williamson—I do not think the office has done any investigations of that. Are those elements within or without?

Senator LUNDY—Could I ask the department to increase the points of presence in the territories so that the people living there will have greater access to the Internet?

Mr Cameron—The commitments that are made in relation to the social bonus system, Networking the Nation or RTIF program, provide for \$20 million to be available for projects which come up from either external territories and other remote or isolated island communities. Those projects are community based projects that will come from local government authorities, for example, or community organisations. Those are aimed at addressing specific communications needs in those areas. They would not affect the operation of either the USO or the customer service guarantee.

Senator LUNDY—If we are talking about the cost of Internet access on Christmas Island, for example, Telstra currently has a pricing regime that is presumably comparable to the remote access pricing regime or perhaps a little different. Is there any hope for change or improvements in affordability for those services related specifically to a successful RTIF grant or are there plans in place to actually allow more affordable access to the Internet through another mechanism?

Dr Kelleher—I understand that there is a local ISP operating on Christmas Island and there are untimed local calls available on Christmas Island. Certainly that has happened reasonably recently, so some people at least on Christmas Island have got fairly good access to the Internet.

Senator LUNDY—The issue for me is that Telstra provides both the wholesale and retail bandwidth with respect to Internet access and Big Pond. Big Pond as a product has discriminated previously on where you sit in terms of regional status; whether you are metropolitan, rural or regional. I am trying to ascertain if there is a mechanism under the plans that are in place at the moment, or developments outside the RTIF, that will lower the cost of Internet access, be it through local ISPs retailing bandwidth purchased or through Telstra Internet access?

Mr Cameron—Under the Telecommunications Act there are provisions which enable competitors to Telstra to acquire access to bandwidth capability from Telstra or other carriers.

Senator LUNDY—Under the interconnectivity arrangements?

Mr Cameron—The interconnection arrangements provide for competing operators to be able to offer Internet services in all areas of Australia and would facilitate increased competition in the Indian Ocean territories. That is the primary mechanism by which commercial competition is being promoted under that regime.

Senator LUNDY—What is the impact of the exemption that Telstra has obtained for preselecting other services in relation to that requirement by the ACCC?

Mr Cameron—The preselection obligation relates to the ability of customers to preselect a different long-distance or international service provider. Essentially that is the call from a customer to either another customer or to their ISP.

Senator LUNDY—That exemption has no relationship to what you are describing?

Mr Cameron—It does not have a direct relationship, which means that exemption is of limited duration until Telstra can install the facility necessary to enable the preselection to occur which, as I understand it, will be in the second half of this year.

Senator LUNDY—So what is the availability of an alternative source to connect to the Internet for the people of Christmas Island, for example? Is there one?

Mrs Alter—There would be the satellite connection and they would have to get their own individual dish.

Senator LUNDY—Is there something happening with the satellite connection?

Mrs Alter—We are looking at that, as I said earlier, in upgrading the USO, which we are reviewing at the moment. We are looking at upgrading the facility.

Senator LUNDY—Is that the old satellite?

Mr Cameron—The government has indicated that it would incorporate into the universal service obligation a 64 kbit download service for the areas of Australia which are unable to access the ISDN service.

Senator LUNDY—Is that under the RTIF?

Mr Cameron—No, that is under the universal service obligation regime.

Senator LUNDY—Is it contingent on the Telstra sale?

Mr Cameron—No, it is not.

Senator LUNDY—So it will happen anyway.

Mr Cameron—The government has indicated that it would like to pursue innovative ways of implementing that arrangement and that could involve, for example, some form of tendering out of the obligation. So, for example, someone other than Telstra—you mentioned the Optus satellite—may be the universal service provider in relation to that. That is a matter that the government is still investigating.

Senator LUNDY—How would that affect the impact upon the interconnectivity arrangements?

Mr Cameron—All carriers and service providers are subject to the access and interconnection regime under the Trades Practices Act, not just Telstra. So any operator who provides a competing service is subject to access and interconnection obligations, just as Telstra is.

Senator LUNDY—How does it work? I am just trying to follow the logic; how does it work if you contract out the universal service obligation to another carrier and then apply the interconnectivity requirements to that?

Mr Cameron—Under the universal service obligation the universal service provider is required to supply on request those services for which they are under that obligation. For example, if the 64 kbit download service was tendered out to another operator, such as Optus, then Optus would be required to provide that service to customers.

However, under the access regime the ACCC is able to declare to be subject to access obligations services which would enable competing operators also to supply their services over other carriers' networks. One obvious example is that under the preselection arrangements Optus, AAPT and other competitors are able to supply their own long distance international services by making use of Telstra's network. It would be possible under the access regime for the universal service provider's satellite download services to be declared and then you would be able to get a range of competing operators supplying services over the same infrastructure essentially.

Senator LUNDY—Do you anticipate that is the direction in which the ACCC will move; to declare those additional higher bandwidth services?

Mr Cameron—I could not comment. The ACCC under the act is required to undertake a public inquiry if it wishes to declare those services. It can do so at the request of the person. For example, if there were people who wished to compete on those sorts of services they could ask the ACCC to investigate. The ACCC is required to consider a number of factors, including whether the declaration would promote competition and the impact the declaration would have on efficient network investment and efficient network operation. If it was satisfied that requiring that access would promote competition and not unduly affect network investment then it would be likely to declare such a service.

Senator LUNDY—If the 64 kbit service was legislated for under the USO, it indicates the direction the government and perhaps the ACCC will move in anyway.

Mr Cameron—I think it is important, regardless of whether it is part of the USO, that the ACCC would be able to declare those services, even if they were offered on a commercial basis. There are some indicators to suggest that a number of operators are considering offering commercial satellite high data services and the ACCC could consider declaring those services, regardless of whether it was covered by the universal service obligation.

Senator LUNDY—The whole notion of applying competition policy with respect to telecommunications and Internet services, has that been explored by any of the agencies or departments here? Has anyone commissioned any studies on the application of competition policy and the impact on costing and affordability of those services on the islands?

Mr Cheah—Not specifically on the islands. There is some work being done on another aspect. There are some other people who are looking at providing satellite services to rural and remote Australia generally; and even if we went down that declarations path, which would provide a safety net in terms of providing the upgraded USOs, there would still be other providers out there anyway. If you had somebody who was going to offer to provide a satellite based service on a commercial basis to regional and remote Australia then there would be nothing stopping them from also providing that to the islands. For example, given that the PAS satellites are used to provide services to the islands now, there would be nothing stopping somebody coming along and saying to PanAmSat, 'We would like to also rent some transponder space from you so that we too can provide a direct satellite service to the residents of the islands.'

The application of the competition, the open regime, does apply to the islands in the same way it applies to the rest of Australia in that regard, in the sense that there is nothing stopping people coming in. You may very well find that there is a little niche in there which people think they can exploit.

Senator LUNDY—Yes. Although, the evidence we have heard is that there is not a big demand and therefore perhaps not a commercial incentive to people to actually explore those markets and that is part of the problem. That is why I am asking. Where you do not have a

viable commercial market in the first instance, does that makes the application of competition policy reliable?

Mr Cheah—If that is the case then that is where you pick up the safety net with the USO, to make sure that the service is there.

Senator LUNDY—No. I just wanted to clarify that. What you are providing may well work in some markets but what we have seen so far is that the model probably is not going to impact greatly on some of the areas we are discussing.

Mr Cameron—In relation to satellite services, given the breadth of the footprints of the satellites, that obviously reduces substantially the cost differences between supplying services in different areas and that does provide an opportunity. I think it is important to note that the competitive framework, as Mr Cheah mentioned, is backed up by the underlying obligations of the universal service obligation and customer service guarantee, which ensure that a reasonable level of service is available to all Australians.

The competition in the open market provides for innovative services and infrastructure to be rolled out by competitors, so that where people do identify these niche markets they can install those services. In addition, the access and interconnection regime provides that even where a number of infrastructure providers may not find it commercially viable to do so, it provides a mechanism for competing operators to operate making use of the same or a smaller number of forms of infrastructure. So there are differing levels of arrangements which would enable a commercially competitive environment to arise where it is a viable approach. However, in those areas where it may not be for now, then the universal service obligation and customer service guarantee arrangements do provide a base level of service.

Senator LUNDY—How much does the new and converging technology, such as the voice-over IP, come into your considerations about what happens next with the regulatory regime and making assessments about the cost structure for what it is costing Telstra to provide the universal service obligations? Do you take into account the potential alternative technologies that could be used to deliver services but have not been chosen by a given carrier? How do you work around that?

Dr Kelleher—The forward looking technology basis of the USO costing allows us to take into account technologies which may not be used but which were commercially available and could have been used had Telstra chosen to use them. Certainly that is one of the things we are doing at the moment with consultants; looking at what technologies were available at that time, not just what technologies might be available today but what technologies were available at the time and what could have been used at that time to deliver the service, other than the technologies which Telstra chose to use.

Senator LUNDY—That would end up being quite a subjective assessment, I would imagine, in many respects?

Dr Kelleher—No. It turns out to be a fairly technical assessment based on a number of criteria such as the capacity of technology to actually meet the standards that are in place

and the availability of the technology on the market. So fact it can be broken down into some fairly objective criteria.

Senator LUNDY—Taking voice-over IP as a classic example, I have heard of examples in South Africa of whole towns or villages, rather than being wired up with copper for their telephone service, going straight to a high bandwidth technology, either PC-based or similar, with voice-over IP as the telecommunications technology. The issues then about the accessibility and availability of technology relate to education infrastructure, community infrastructure, transfer of government services online, et cetera. Do you take into account the bigger picture issues in your assessment or do you pull away and, because voice-over IP is actually not out there being widely used in isolated remote communities, it does not factor into your assessment?

Dr Kelleher—I have to go back to what I said and that is that the technology has to be commercially available and commercially viable. One of the judgements, for example, is whether or not Telstra can in commercial reality decide to use that technology. It has to be capable of showing that Telstra was able to make a profit under normal commercial circumstances.

Mrs Alter—Under the USO you have a certain quality of voice-over, quality of service; your voice-over on the Internet may be a different quality. So there is a base level that they have to meet as the universal service provider and it is up to them how they meet that.

Senator LUNDY—I am presuming they would meet those quality standards. I am trying to get a feel for the scope of your assessment with respect to new technologies and how that would apply. It is really a question of what opportunities exist to leapfrog some technologies to get these communities connected with the bandwidth necessary, not just for their telecommunications usage but where the technology is taking them in terms of business opportunities or commercial opportunities for the citizens on these islands.

While I appreciate your point about Telstra, your assessment is are they doing this elsewhere and can you turn a quid out of it? In relation to those islands, possibly not. Maybe we do not have models in Australia, but we do know that Telstra is investing heavily in this area of technology and I would see this as being worthy certainly of being factored into your considerations about where to next for these islands.

Dr Kelleher—Certainly for a technology that is acceptable for the USO it does not have to actually be commercially used within Australia but it does need to have been established as a viable technology in similar circumstances. As I say, it does not have to have been proven in Australia. Largely that would reduce technologies to the ones that we know about and which are terribly obvious to us today.

Senator LUNDY—Quite consistently—and this applies to many rural and regional communities in Australia—the accessibility and availability of bandwidth is seen as a critical determinant in future economic growth and opportunities. How do you weight those kinds of issues into your considerations, or is that outside your scope?

Mr Cameron—I think in relation to the cost assessment, the ACA is responsible for assessing the cost claim by Telstra under its current obligation, which is now to provide a payphone service. The government's commitment to upgrade the USO would provide for a higher level of bandwidth availability, either via an ISDN equivalent service or a satellite download service.

Senator LUNDY—I am sorry; can you just say that last bit again?

Mr Cameron—The government has committed itself to upgrading the universal service obligation to provide an ISDN equivalent service.

Senator LUNDY—That is 64 kbits?

Mr Cameron—Yes, for 96 per cent of the population; and for the remaining 4 per cent who do not have access to ISDN, a satellite download service of 64 kbits equivalent. That upgrade of the USO will be incorporated into the ACA's assessments of costs in the future when that comes along. Mr Cheah might wish to comment in relation to bandwidth. The National Office for the Information Economy is undertaking an inquiry into bandwidth availability, primarily at the trunk network level, which is looking at current and future needs in terms of bandwidth and its availability.

Senator LUNDY—I just wanted to clarify the point there. Apart from that upgrade of the USO to a 64 kbit ISDN level service, the only opportunity for higher bandwidth would be if there were a commercial opportunity out there and someone chose to provide the service in the hope of making a bit of money out of it?

Mr Cameron—That is correct, the universal service obligation is the obligation in terms of acquiring those services. The Australian Communications Authority undertook a review of whether a digital data capability should be incorporated into the USO and found that the benefits associated with a higher level would be well outweighed by the costs of doing so. But in terms of those higher bandwidth requirements particularly within the network, the bandwidth inquiry is looking at what is available, what are the needs and demand drivers over the next number of years and whether there are barriers which can be addressed by governments or by the private sector to ensure bandwidth availability meets the needs of the information economy.

Senator LUNDY—How broad a scope do you actually have?

Mr Cheah—If I can perhaps answer your question, Senator. You asked whether the only other way we can provide higher bandwidth at the moment would be through competition. There is one other route and that, of course, is the RTIF. The government's actual strategy at the moment is to say there is a safety net in place, which is the USO. At the moment, to the extent that the market does not meet needs over and above that, we need to look at other ways of doing it. The other strategy the government has in place at the moment is the RTIF.

Senator LUNDY—But that is contingent on the sale of Telstra.

Mr Cheah—No, the current RTIF has \$260 million which is there at the moment. If a community can come along and bring a case to say that our community needs to have services on a higher level and there is some reasonable prospect of longer term sustainability for those services then they could make a case to the RTIF board. Obviously it is not my role to talk about that but the government has another strategy in place to look at things even now.

In relation to the bandwidth inquiry, as Mr Cameron said, one of the recent initiatives of the government at the last election was to say it was going to establish a national bandwidth task force. That is now called the national bandwidth inquiry and it is basically going to look at what is the outlook for capacity within Australia generally over the next five years for higher bandwidth services.

The primary focus is on, I suppose, the trunk network, as well as, obviously, the implications for the CAN; CAN has a pretty important influence there. Particularly in regional areas it is hard to make that distinction sometimes. We are also looking at pricing issues and a few other quite specific issues as well, in terms of Internet pairing and submarine cables and issues such as that. We can certainly provide the committee with a copy of the terms of reference of that inquiry if that would be helpful.

Mr NEHL—Before you move on, I would like to chase Mr Cameron down a rabbit hole. You reported that by the end of 1998 ISDN would be available to 96 per cent of the population. That is what you alluded to, I believe.

Mr Cameron—There is currently a licence condition with Telstra which requires, as you say, that by the end of 1998 Telstra was obliged to be in a position to provide an ISDN service to 96 per cent of the population on request.

Mr NEHL—How does that fit in with something else in the digital data review which says that Telstra does not have the network capacity to reach that? It says that by 1998 it is going to be there and the same document, I believe, says that the capacity in the network does not exist to satisfy that claim.

Mr Cameron—I am not aware of that comment. Maybe the ACA can recall that specific comment. My understanding is that the report was primarily focused on the remaining 4 per cent of the population for which, under that licence condition, Telstra is not required to be in a position to provide that ISDN capability.

The ACA found that there were obvious issues in regional and remote areas in terms of access to bandwidth capability. As a result of that review, the government has decided that the obligation which currently applies to Telstra will be incorporated into the USO and in addition to that an obligation will be imposed to provide a satellite downlink service at 64 kbits to those remaining 4 per cent, which would require the universal service provider in relation to that service to make that capacity available via a satellite service.

Mr NEHL—Perhaps you could clarify that and alleviate my ignorance because the document states that for 9.6 kbits the Telstra public fixed telephone network is currently capable of providing 95 per cent of urban and major provincial subscribers, only 70 per cent

of rural and remote subscribers; at 14.4, only 85 per cent of urban and major provincial subscribers and 60 per cent of rural and remote; and at 28.8, 60 per cent of urban and major provincial and only 30 per cent of rural and remote subscribers. I am not a statistician but I do not believe that adds up to 97 per cent.

Mr Cameron—Those statistics refer to Telstra's public switch telephone network, which is essentially the network which is designed for the voice telephony capability. In addition, Telstra's network is capable of providing ISDN services by making use of an overlay network, if I can call it that, a virtual network which overlays the ISDN, and it is via that network that Telstra complies with its obligation in relation to 64 kbits.

Mr NEHL—So the ISDN network has a far greater capacity than the public telephone switches?

Mr Cameron—Yes. They are closely interlinked and they use the same facilities in many areas, but yes, it is a different service. Essentially those figures relate to the capabilities you will be able to access if you pick up your telephone at home and attach it to a modem, as opposed to if you required or requested an ISDN service to be connected to your home.

Senator LUNDY—Just on that point of Telstra's proposed data mode of operation, what will be the impact on what you just described then of this new proposal?

Mr Cameron—This question is possibly best referred to Telstra, but Telstra is increasingly incorporating into its network through the data mode of operation a network which is designed for voice and data. It is that network reconfiguration which is the data mode of operation. The obligation under the regulatory regime to provide the ISDN capabilities and telephone service requirements do not change.

Senator LUNDY—Will they apply equally to new infrastructure installed by Telstra and the DMO?

Mr Cameron—They apply to any universal service provider, so Telstra's obligations will continue regardless of the nature of the network that they use to meet those obligations.

Senator LUNDY—Given this issue about the 96 per cent and the difficulties you identified in extending that across to the additional 4 per cent, what is your view of Telstra's extension of capability under DMO and the continued failing to be able to achieve 100 per cent coverage of 64 kbits with the services?

Mr Cameron—I am not sure that I understand the link between DMO and—

Senator LUNDY—It is a question of Telstra choosing to invest in improving a service in certain markets but remaining incapable of providing a blanket cover of a minimum 64 kbit service. It is a commercial issue for Telstra obviously but I am asking what your view is in terms of trying to achieve a high standard level of service.

Mr Cameron—The government has indicated its concern with the bandwidth accessibility in relation to asking the ACA to undertake the digital data capability inquiry last year which resulted in the initiatives that I have indicated, and the national bandwidth inquiry which Mr Cheah has discussed. The ways in which Telstra manages its own network and manages its operation is a matter for Telstra. It is required to comply with the universal service and other obligations imposed by the regime.

Senator LUNDY—Going back to NOIE, I just want to follow up the previous questions about the scope that NOIE applied in looking at the provision of service to remote areas generally. Here we are talking about external territories. Have you, as an office, looked at the concept of leapfrogging technologies in these communities?

Mr Cheah—In terms of the access technologies, I think that most of those issues primarily would be dealt with by our colleagues in the communications area. Obviously we are interested in promoting access—

Senator LUNDY—They have already said they have a narrow scope in terms of how they address and look at these issues. I am asking you how broadly do you range in your consideration of how best you can assist these people.

Mr Cheah—Obviously telecommunications infrastructure is regarded as a key enabler of the information economy. We regard the provision of telecommunications infrastructure generally as being an important issue that needs to be addressed. Obviously when we address these things, we are looking at it from within the overall framework of that particular issue having to fit in with other government policies, and we have got an existing telecommunications policy framework.

You are suggesting that the telecommunications policy is very narrowly focused. The USO framework is obviously focused on the safety net which is the voice service but, as I mentioned before, there are three or four planks in the government's existing strategy. It involves a safety net; it involves trying to set up a market structure which encourages entry; and where entry is not likely to be possible, as Mr Cameron explained, it has got an access regime which allows access via other monopoly services. Then you have got the RTIF program as well, which is there to try to address in a more targeted way the needs of particular communities and, at the same time, try to get the balance between doing all this in a cost effective way.

One of the interesting things that Mr Cameron also talked about was the ACA inquiry which is really doing a fairly rigorous cost benefit analysis of the way services are provided to these communities. I suppose if we had a fundamental difficulty with the way the framework was operating then obviously we would take that up with the government.

Mr Cameron—You mentioned the focus of the ACA's assessment as being, in your words, a narrow focus. The ACA's assessment of Telstra's cost claim is an assessment of Telstra's claim in relation to the 1997/98 year and in relation to the universal service obligation Telstra had in that year which is to extend the telephone services and payphone services. Telstra's cost claim is not therefore an assessment process about how the policy

arrangements might change in the future. That was the digital data review capability in the national bandwidth inquiry.

Senator LUNDY—I appreciate that, Mr Cameron, and thank you for confirming it. The point I am trying to make—and I am not saying necessarily that the witnesses here are from the bodies responsible—is, in terms of a policy approach from the government, issues such as industry development, potential for economic growth, what constitutes the most cost effective way to deliver these services, those sorts of considerations might need to take place outside each of the areas in which you have focused your attention. That is an observation from my point of view, having perused a fair range of information.

Mr Neil—If I can make some very general comments, Senator. They are really based on the fact that in the most recent restructuring of the Department of Communications, Information Technology and the Arts we do have a span which covers a lot of the issues which you have raised within information technology. The department has been involved in some planning exercises in recent times to think about the sorts of issues we need to address. Obviously, rural and remote telecommunications, information technology and the role of the information economy are continuing issues that we need to address. We are giving and will continue to give focus to them and try to bring together what up until now has been, if you like, in some areas a more disparate approach to dealing with individual technologies in individual sectors.

Senator LUNDY—I am pleased to hear that, particularly with the emphasis on what the government is doing online in increasing the range of services with particular relevance to remote communities. I am putting that forward as a way of underpinning the importance that I see in having accessible, affordable Internet access, because it presents with it not just getting on the web or email but a whole plethora of subsequent services that are being offered now by government and commercial services, such as banking online and telemedicine; all the issues that we have seen cruising through the course of this inquiry.

I would like to underpin the point that we are not just talking about Internet access as another in a range of telecommunications services but as, in fact, a central point of conversion for how people in remote communities will get information and support.

CHAIR—Thank you, Senator Lundy. Thank you to the Department of Communications, Information Technology and the Arts for coming along. It is probably timely that we call Telstra now.

[3.49 p.m.]

HIGGINBOTTOM, Mr David Arden, Manager, Federal Government Liaison, Telstra

**KENT, Mr Peter Russell, Regional General Manager, Network Infrastructure—
Western, Telstra**

CHAIR—On behalf of the committee, I invite you to make any opening statement you may have. In your opening statement, could you just outline any developments that may have occurred since you last met with the committee back in June 1998.

Mr Higginbottom—I have just submitted a document that brings everything up to date. Basically our original submission is still correct although, obviously, having done a whole series of works on both islands, things have substantially advanced. In terms of Cocos (Keeling), we are expecting that the upgrades will be completed by June this year. I think the cutover of the exchange is occurring—

Mr Kent—On Cocos it is currently planned for 23 February.

Mr Higginbottom—And on Christmas Island—

Mr Kent—By 30 June.

Mr Higginbottom—So both of those are on time. That will improve things fairly dramatically for the islands, which previously had an analog mobile system connected to the wall—that operates as a fixed service of fairly unreliable communications.

Senator WEST—Will west island be able to talk to home island?

Mr Higginbottom—You are asking for local knowledge. If they have two phones they will be able to. They will require phones, otherwise it is shouting. If they both have phones, which I think they do have, they will be able to do so. With that upgrade, apart from the USO capabilities and CSG capabilities, they will also have access to modern easy call type facilities that we have now, such as call waiting—

Mr Kent—And call forwarding and three party conference.

Mr Higginbottom—All those sorts of facilities that they do not have now. There is one matter with that: it actually operates from a switch and it will have to go back to Perth to operate, so there is a slight delay while those facilities are accessed but once those facilities are accessed they have got immediate access. There is a few seconds delay because of the satellite hop but once the call has been set up it reverts to normal. That will bring carrier preselection which is the major legislative requirement that has been on us, and that will then give them access to the call rates and facilities that are offered—the STD call rates and international call rates—by all other carriers; something which is potentially of reasonable value to them.

In terms of the upgrade, we have cabled both islands. There has been some delay on Cocos. We were originally going to cable the island in conjunction with the sewerage works, who were also digging trenches. That did not go ahead on time for us to meet our obligations so we went ahead and did our own trenching. So there was some delay with that from our point of view and some additional cost, obviously, but that is still within the time scale.

When all that is finalised, the islands themselves will have access within the island to the same speeds as we get within our own domestic network. For instance, if you have got a modem capable of doing 33.3, you have access to that on the island. In terms of the island to the mainland, they are limited to the speed of the satellite link, which is 14.4.

Mr Kent—I would probably not go beyond 9.6.

Mr Higginbottom—So there is a limitation in speed to the mainland. However, they have got the 33 board access within the islands. In the case of Christmas Island, I noted the questions about Internet access. There is—or was, and I hope still is—an ISP on Christmas Island and all accesses to him would be at the higher speed. In relation to his access to the mainland, he purchased from us a 64 kbit link to the mainland, which gave him access to the mainland at higher speed, and then through his network everyone had access to him at normal domestic speed.

Senator LUNDY—Can I ask a really basic question in respect to that?

Mr Higginbottom—Sure.

Senator LUNDY—If he can purchase from you a 64 kbit bit of pipe, why is it that you do not provide a 64 kbit bit of pipe to other customers, be they wholesaling or retailing bandwidth from you?

Mr Higginbottom—We would and we do. The issue is cost. It is provided on a usage basis and because you are paying for satellite time, you are paying in the order of \$100,000 a year.

Mr Kent—He has actually taken a leased service from us, not a switched telephony service.

Senator LUNDY—So the answer is that it is a dedicated link.

Mr Higginbottom—It is a permanent dedicated link.

Senator LUNDY—Yes.

Mr Higginbottom—It is available to anyone else who wished to purchase it.

Senator LUNDY—So the issue is one of Telstra's choice on how you commercially on-sell bandwidth in terms of affordability?

Mr Higginbottom—Yes. I would mention that I have drawn to the attention of the Department of Transport and Regional Services that there are other service providers who provide Internet access. You may have noted that in Western Australia, for instance, there are some sites in regional areas which are directly accessing Asian satellites for Internet. There is a school which has been working on that and in fact we have assisted in a couple of cases with some of the dish design.

The issue there is this provides a dedicated but specific to Internet access. They are the sorts of areas, I think, where if it is price competitive in regional areas of WA it can be even more price competitive on Christmas Island. I do not think in the case of Christmas Island it is limited to how Telstra might deliver those services. There are other services available and commercially available that it can access as well.

Senator LUNDY—I do not want to interrupt you if you were continuing to make your point.

Mr Higginbottom—No, I have made my point.

Senator LUNDY—Again on that point, I am just trying to ascertain quite specifically the issue of affordability and how much it would cost, say, an individual or a family to procure a 64-kbit link. What is precluding them from doing that? Is your choice as a company to sell bandwidth in the way that you do—nothing else? There is no technological or technical requirement for you to sell it in that way, apart from you getting some commercial return?

Mr Higginbottom—I would have thought we would be prepared to sell bandwidth in any way that we could. That is a commercial decision.

Mr Kent—The delivery mechanism to Christmas Island has to be by satellite.

Senator LUNDY—I appreciate that. Perhaps if I ask my next question you will see where I am coming from. Basically because of the USO requirements and the fact that what it costs you to deliver a service to them has to go through the convoluted process described by the department earlier in terms of assessment, if in fact you provided a service more cheaply to residents of these islands, you would be able to demonstrate that through this mechanism and it would all work out *quid pro quo* in the end.

Mr Kent—In terms of bandwidth requirements for somebody using the Internet, there are a number of things that limit their bandwidth, ranging from their personal computer, its capacity, its design, the modem being used, the Internet service provider being used and, of course, the way the Internet service provider chooses to connect into the worldwide Internet. In the case of Christmas Island there is an ISP on the island who does have a 64-kbit link into the World Wide Web. What he chooses to charge people there is a straight commercial arrangement between him and his customers; I am not privy to those prices.

Senator LUNDY—Entirely contingent on him recovering his costs to you.

Mr Kent—And making a reasonable profit.

Mr Higginbottom—In terms of data and Internet, there are lots of opportunities for him and also for people on mainland Australia to use satellite to deliver services.

Senator LUNDY—I am working on the basis that a lot of my questions imply that there is not active competition out there for Internet access. There might be some other satellite services that perhaps just are not in demand or are not quite as available.

Mr Higginbottom—People like a bit of active competition.

Senator LUNDY—You heard the discussion previously about how we can actually leapfrog technologies and utilise opportunities to get higher bandwidth Internet access to resolve a whole plethora of other problems and competing technology, particularly with respect to Telstra's investments on those islands. What seems to be the continual response by Telstra to the demands of the legislative requirement is that you have got to get the standards up to meet that minimum requirement under USO or CSG or whatever. Given the way you charge for bandwidth, are you not effectively precluding a leapfrogging technology that would wipe out all of those issues and actually introduce a bandwidth and a level of service that can decrease the complexity of all these universal service obligations?

Mr Higginbottom—In this particular instance, bandwidth is not part of the USO. Just following that logic through—

Senator LUNDY—I know what you are saying.

Mr Higginbottom—If we are providing the service at a very high cost—it is not cheap by any means—but if we continue to provide that service at that cost and people can do it for a cheaper cost or in a more efficient way, there is nothing precluding them from doing so. Following your assumption, if prices are high that would encourage competition, given that there was—

Senator LUNDY—So, if you keep prices high, that encourages competition?

Mr Higginbottom—No. I am following your logic and suggesting that, if we are keeping our prices high, that would have the effect of having people look at alternative technologies to do it. Certainly, if the prices were at an unrealistically low price, of course, you would never get competition in delivery because no-one would want to move into a service which is cross-subsidised.

Mr Kent—There are methods of Internet service provision on the islands at the moment. One is the one we have mentioned through the on-island ISP. He has a 64-kbit link and, as I said previously, the speed of access would be limited by all those other parameters in the local network. The alternative is Big Pond provision by rural connect; I think, from memory, their current tariff is \$7 an hour. The final method of provision is not particularly useful for business or educational but for home usage—it is in the 7 o'clock to 12 o'clock type activities—there is a \$3 special Telstra runs. So you can hook on to the Net and hook up to a mainland ISP.

Senator LUNDY—What is that service called?

Mr Kent—It is actually not a special—I should retract that word. It is \$3 for unlimited time.

Senator LUNDY—There is a special name for that product, is there not?

Mr Higginbottom—Yes, 7 o'clock to midnight STD standard rate anywhere in Australia, which includes Cocos and Christmas.

Mr Kent—In doing so, anybody on the island can call an Internet service provider on the mainland for \$3 for up to five hours and pay his or her standard rate for connection to that ISP on the mainland.

Senator LUNDY—That brings me to another point. I take your point about the various options. This is more of a reflection, I suppose, on government policy and the direction they head with converging technology and the opportunity for voice-over, et cetera. But from Telstra's point of view, going to that point that you have just described in wholesaling bandwidth and retailing bandwidth to these islands, what is your internal structure for dealing with the potential anti-competitive challenges that I know have occurred on the mainland?

Mr Higginbottom—I am not quite sure where you are heading with that question.

Senator LUNDY—This is a question—and it is something that was raised with respect to Norfolk Island—where in fact the Norfolk Island administration have embarked upon the establishment of their own Internet service provision in what seems to be competition with a pre-established ISP, raising questions that relate to the pairing and interconnectivity of ACCC decisions. My question is: if you are providing a commercial service that you have just described in competition with an ISP to whom you are on-selling bandwidth, how does that impact upon costs, given in effect your previous statements about the need for not lowering costs to the point of it being open slather, no competition, subsidised service, no worries, to actually providing a highly competitive retail service in the same area? How does that mess around with, one, the competitive framework on the island for ISP Internet access, and, two, Telstra's own internal arrangements for managing the tension between both wholesaling and retailing bandwidth?

Mr Higginbottom—In terms of Cocos and Christmas Islands we have taken an attitude that it is not an environment where we generate revenue to any extent. The upgrade works that we have just completed on Christmas Island cost \$8 million.

Senator LUNDY—But that is in response to the USO; it is not because you are investing to return greater revenue.

Mr Kent—It was in response to the need to provide a preselection option.

Senator LUNDY—Yes, but it is still a legislative requirement.

Mr Kent—Yes.

Mr Higginbottom—The attitude we have taken in terms of those islands is that, if the islands are being satisfied and serviced to the best of the ability of the industry to service those islands—to be honest, it sounds broader than the view that Telstra should perhaps take, but from our point of view—it is to our advantage because it provides them with a service in a way that suits their needs without putting a lot of pressure on Telstra to try and meet those needs in some way, shape or form.

Senator LUNDY—You do not make any money out of it. You have to wait 12 months to get your money back.

Mr Higginbottom—That is right.

Mr Kent—To get 15 per cent of the money back.

Senator LUNDY—That is right. I think that is actually a critical point, in that for Telstra the economics are not there because any return to Telstra has significant delay in a convoluted bureaucratic process. It comes back to what are the actual triggers and pressure points for technology to advance in this region.

Mr Kent—Clearly Telstra meets its universal service obligation in the Indian Ocean territories.

Senator LUNDY—I would not expect you to say anything else.

Mr Kent—That is not an inhibitor at all; it is happening.

Senator LUNDY—I take your point about that.

Mr Higginbottom—In the whole approach we take to Christmas and Cocos we have gone to extreme lengths to try and ensure that they are kept up to standard or brought up to standard. I think we have probably gone beyond what our legislative requirements are in the way we have provided services, in the work we have done in terms of trying to talk to the islanders to find out what they want in services.

Senator LUNDY—But you will not drop your bandwidth costs.

Mr Higginbottom—The cost of the leased circuit back to the mainland is high; satellites are expensive.

Senator LUNDY—You are saying you are doing more than you are required to do legislatively—which is fine and excellent; it is commendable—but at the same time you do not do the work where it actually makes a difference to the initial access, as opposed to infrastructure.

Mr Higginbottom—I think the point I was trying to make before is that from an opportunist's point of view there are a variety of ways to access the Internet. Some of them are quite reasonable in terms of cost. My own preference would be that the local ISP be strengthened. You are dead right: one of the issues is that people can ring up the mainland

and utilise the \$3 service and therefore do not utilise his services and perhaps therefore do not give him the power or the customer base that he needs.

In terms of how the ISP might access the mainland as well, there are a variety of services available for the Internet, because it does not matter whether he accesses the Internet in Perth or anywhere in the world. The issue is that there are a lot of technologies that are just starting to become available which provide Internet via satellite. There is, as I said, the service that operates which people in WA are starting to pick up. It is also accessible from the islands. I think there are a lot of opportunities that are coming, and I do not think that is going to be a major limitation. Whilst the cost of getting bandwidth back to Australia is a certain price, it is dedicated bandwidth. The Internet can be accessed via equipment or systems which are designed to provide Internet and therefore you are not buying a dedicated link; you are buying something accessible on a needs basis and which is designed to provide those services. Those services are starting to become available now, people on the mainland are using them and the prices are therefore competitive. There are a lot of other technologies coming along that will not require the use of dedicated bandwidth and that would be a highly inefficient way. While it could be added to the USO and subsidised by the USO, that would be in this instance an inefficient way of providing a service which, if left to market forces, I think in 12 months, two years or three years those sorts of things will be solved.

Senator WEST—Can I ask about the life expectancy of the PanAmSat.

Mr Higginbottom—PAS 2?

Senator WEST—Yes.

Mr Kent—I heard the question before and I have some difficulty understanding exactly where you are coming from on this. Satellites typically stay in orbit for five to 15 years. They run out of life; they run out of horsepower. You may look at newer high capacity satellites to move into that orbital slot and replace a satellite that perhaps has three years good life left in it. Satellites run out of life because they run out of fuel to stay positioned in the exact spot. There are a lot of satellites up there; there are more going up every year. The orbital slots become very valuable. There is propensity amongst the satellite service providers to put in newer and higher powered satellites to replace older lower powered satellites. When PAS 2 disappears there will be something else to replace it.

Senator WEST—Would it give optimum coverage?

Mr Higginbottom—Your question would be directed towards TV coverage, I assume?

Senator WEST—Yes. But it comes off—

Mr Higginbottom—PAS 2.

Senator WEST—And is it the optimum satellite to have it on?

Mr Higginbottom—In terms of the islands, they have got what we call fortuitous coverage. The footprint of PAS 2 extends to the islands but it is not designed to extend to the islands.

Senator WEST—Therefore they have no guarantee of service.

Mr Higginbottom—They have no guarantee.

Senator WEST—And when the wet season comes and the cloud cover comes over, you get some atmospherics.

Mr Higginbottom—That is for TV. I understand where you are coming from. The issue there is with digitisation when it moved from the analog service to digital, Telstra entered that market and is providing service which overlaps with the island. The alternative service, the Optus service on B3, I understand—unless there has been other information—has no footprint at all that covers the island.

So in one sense fortuitously the islands are continuing to receive TV coverage, which, if we had not entered the market, perhaps they would not be now receiving. But it is very much always the fact that it is fortuitous; it is not a design requirement that the satellite provides those services.

Senator WEST—That is part of their complaint because they cannot be guaranteed a year-round all-weather service. What is the length of life left in that satellite? When do you think you are going to have to move off that one on to another one?

Mr Kent—I think what is relevant is not the length of the life of the satellite.

Senator WEST—It might be the length of your contract with PanAmSat.

Mr Higginbottom—Yes, the length of our contract with the customer. I think it was a two-year or three-year contract that we took out which started in July last year. Effectively our customer could decide to change satellite providers at a particular point in time. That is not our intention but that could always happen. To be realistic, you should be aware that there may be some rationalisation occurring in WA which may cause some loss of satellite signal, but that is something which is very much up in the air.

Senator LUNDY—So to speak.

Mr Higginbottom—Yes, so to speak. We are very aware of Cocos and Christmas and we are trying very hard to make sure that they are factored into anything we do. But it needs to be understood that we just cannot guarantee it.

Senator WEST—Those changes that you speculate about and allude to: would they affect the telephony system?

Mr Higginbottom—No.

Mr Kent—The telephony system is on the Intel satellite in the Indian Ocean region and Christmas and Cocos islands are firmly within the footprint.

Senator LUNDY—What about the Ericsson-Hughes-Telstra proposal? Is that on PAS 8?

Mr Higginbottom—That is on PAS 2 and PAS 8. There is a problem with the satellite out on the islands for PAS 2 and PAS 8. I am not sure about PAS 8's footprints, so I will talk about PAS 2. In terms of PAS 2, on the mainland you can use a 0.9-metre dish to receive, and therefore you can utilise it in a home situation; it becomes quite reasonable to use satellite Internet. We have talked about costing being something like \$80 a month extra over the ordinary ISP costs and they are the sorts of figures we have used. In terms of what the islands are using—how big is it?

Mr Kent—I think it is about a 6-metre for TV but I do not know what would be required for internet.

Mr Higginbottom—One assumes, and again this would have to be tested, to pick up the Internet you would be using a similar sort of dish to pick up the signal. They are in the order of hundreds of thousands of dollars. We provided one for \$20,000 to Cocos and Christmas because we had one in store, but if you wanted to buy one you would be paying in the order of \$100,000 to \$120,000. It is not the sort of thing that an individual can do.

One of the things that may become possible is that if we are running Big Pond or that Internet service on PAS 2, if it is accessible from the 6-metre dish and that works effectively, that in itself can provide a wholesale capability for a local ISP. So those sorts of things become possible and become cost effective, but you need one person to wholesale it to the rest of the island.

Senator LUNDY—Can you take on notice PAS 8's footprint, particularly with respect to that partnership initiative and its link with the Farmwide project, because I know that is specifically designed for an Internet satellite link, to try to address all of these issues about remote access, so I would be interested in where its coverage extends to.

Mr Higginbottom—One thing I will also do, which is not really something that Telstra should be doing, is find out information for you on the service providers that have footprint that covers that area.

Senator LUNDY—And the speed.

Mr Higginbottom—And the speed. I think that is important. Cocos and Christmas are a long way from Australia but very close to other areas.

CHAIR—Can you also find out about the USO bill you put in recently.

Mr Higginbottom—I have not seen the latest. In fact the latest I saw, which was 1996-97, was about \$600,000 for Christmas and about \$300,000 for Cocos. Since then we have spent, as I said, \$8 million on Christmas and \$2 million on Cocos. You could theorise—although Peter would probably disagree with me, as an engineer—that our maintenance costs

should improve dramatically once the system is replaced; however, Christmas is a very harsh environment. However, once we have provided a very good and reliable service to both islands, our running costs will go up dramatically. So I think in the next two years the costs could be very different.

CHAIR—See what you can come up with.

Mr NEHL—Before you ride off into the sunset, if we can travel to the east, in our first hearing on 5 June last year there was some discussion about the high cost of calls from Norfolk Island to Australia and the fact that the price is a decision of Norfolk Telecom and the government of Norfolk Island. However, the exchange of calls between Norfolk Island and Australia involves a charge by Telstra to Norfolk Telecom under the settlement regime. When the committee was on Norfolk Island there was quite a lot of discussion about the charge. Could you tell the committee, please, what the settlement regime is that occurs between Telstra and Norfolk Telecom and what proportion of call costs does Norfolk Telecom pay Telstra?

Mr Higginbottom—I do not know the answer to that in terms of Norfolk Telecom specifically. I will find out for you what percentage they pay, the settlement rate.

Mr Kent—The accounting rate.

Mr Higginbottom—The settlement and the international accounting rate.

Mr Kent—I am not aware of what that accounting rate is.

Mr NEHL—To call Norfolk from here is far cheaper than to call here from Norfolk.

Senator LUNDY—A huge discrepancy.

Mr Kent—You need to understand that the tariff the telecommunications companies charge at each end, the relationship between that and the settlement rate, is a fairly artificial thing. To some extent, if the traffic in each direction was similar—the same number of minutes originated in Australia that originated in Norfolk Island—the settlement rate probably would not matter; there would be actually no settlement.

Mr NEHL—Except the actual cost for the resident or visitor to Norfolk Island is inflated because Telecom puts a—

Mr Kent—That is a matter for the Norfolk Island administration.

Mr Higginbottom—It is a taxation. Even for the settlement rate, I will find out what I can tell you, but there is going to be a commercial-in-confidence issue.

Mr NEHL—Of course, I understand.

Mr Higginbottom—So I cannot promise to give you that. The issue is where there is a difference—and you put your finger on it. It is an issue of what charging is done by Norfolk Telecom.

Mr NEHL—Thank you.

CHAIR—If there are no other questions, gentlemen, we thank you for coming. We should now be able to wind up our report and have it, hopefully, finished—three weeks would be the maximum.

Resolved (on motion by **Mr Nehl**):

That this committee authorises publication of the proof transcript of the evidence given before it at public hearing this day.

Committee adjourned at 4.19 p.m.

