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PRODUCTIVITY COMMISSION

REVIEW OF TELECOMMUNICATIONS SPECIFIC COMPETITION REGULATION

PROF R.H. SNAPE, Deputy Chairman PROF M.C. WOODS, Associate Commissioner

TRANSCRIPT OF PROCEEDINGS

AT SYDNEY ON WEDNESDAY, 16 MAY 2001, AT 9.05 AM

Continued from 15/5/01

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PROF WOODS: Welcome, ladies and gentlemen, to the draft report hearings for the Productivity Commission inquiry into telecommunications specific competition regulation. I'm Mike Woods and I'm the presiding commissioner for this inquiry. I'm assisted in this inquiry by Richard Snape, who is deputy chairman of the commission. The draft report was released on 29 March this year. It covers Part XIB and XIC of the Trade Practices Act and various parts of the Telecommunications Act. The commission is requested to aim to improve the overall economic performance of the Australian economy in its considerations. A copy of our full terms of reference is available at the end of the room.

Could I reinforce the point that we've been making during the inquiry that this is not just a stocktake of the here and now but is about setting the regulatory framework for the medium-term future of telecommunications in Australia. I'd like to express our thanks to those people and organisations who have contributed to the inquiry to this point, including those who have responded to our draft report. These hearings represent the next stage and will be a valuable input into the finalisation of our report. The final report will be provided to government by or before 22 September 2001.

I would like these hearings to be conducted in a reasonably informal manner but I remind participants that a full transcript is being taken and will be made available to all interested parties. It will be posted to our Web site within three days of the date of hearing. At the end of the scheduled hearings for the day I will provide an opportunity for any persons present to make a brief oral presentation should they wish to do so. I'd like to welcome to the hearing our first participants from Vodafone. For the record please could you state your names and your position in the organisation.

MR CLARKE: David Clarke, I am general manager regulatory and carrier affairs.

MR STIFFE: I am Peter Stiffe. I am general manager group regulatory for Vodafone Pacific.

MR KENNEDY: I'm Sean Kennedy, policy analyst in regulatory and carrier affairs.

PROF WOODS: Thank you very much, gentlemen. Do you have an opening statement you wish to make?

MR STIFFE: Yes, we do.

PROF WOODS: Thank you.

MR STIFFE: Thank you for the opportunity to provide feedback on the commission's draft report. In our view the commission is certainly moving in the right direction through the draft report; however, we believe that you can go further towards recommending a generic legislative approach to the regulation of competition and telecommunications. The industry is in a period of dramatic change

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driven by customer demand, technology and intense competition. End users are benefiting through lower prices and better quality as well as having access to new and innovative products and services. The competitors themselves are also changing. Mergers, acquisitions and consolidation are occurring at a very rapid pace as the industry continues to reinvent itself to meet the challenges of the competitive arena and the international investment markets.

The benefits of competition have been most strongly felt in the mobile market. Five network owners and a multitude of service providers have created what we believe is one of the most competitive mobile markets in the world and we compare that against the experiences of the Vodafone group worldwide. Since its introduction in 1997 the regulatory regime has had differing impacts across the industry. There has been little direct impact on the mobile market to date. However, we note recent moves by the ACCC to broaden its regulator focus to include non-dominant PSTN operators and mobile networks. We consider that the rationale for this is somewhat questionable. Regulatory interventions, especially one of access, need to be tightly focused on durable market failure. In our view, investment and innovation are threatened by a broader scope of regulation.

Our submission is focused on the draft report's proposed changes to Part XIC. While Part XIB is obviously an important element to the regime, we haven't had any direct experience in dealing with it; however, we do consider that the general behavioural positions of the Trade Practices Act can deal with any issues that may arise in the mobile industry in future. If properly implemented, the Productivity Commission's reform package should lead to an improved regulatory environment. We support a number of recommendations in the report that improve declaration and arbitration processes.

However, we are concerned with some of the report's conclusions and in particular, we challenge the perceived pervasiveness of network effects. In our view they are overstated and should not be used to justify the continuance of an industry-specific approach. We also consider that the new declaration criteria, when combined with the Productivity Commission's proposed changes to Part IIIA of the Trade Practices Act, will not achieve the desired outcomes. Legislative pricing principles, as currently proposed, should not be introduced unless combined with a modified declaration criterion that is more tightly focused on durable market failure.

If such market failures do exist, and we don't have a view either way, they could only practically exist in the legacy elements of Telstra's network. A new regulatory approach to competition is required for telecommunications. We believe that it is now time to stop treating telecommunications as a special case. All industries are special cases. The regime should be tightly focused on durable market failure with a formal bias in favour of market-delivered outcomes rather than regulatory action. What I'd like to do now, if that is okay with the commission, is to hand over to Dave Clarke just to provide a few words about how we see the future developing in mobile communications.

PROF WOODS: Vodafone's vision.

MR STIFFE: For what it's worth.

PROF SNAPE: Thank you. You must have been listening.

PROF WOODS: We welcome that.

MR CLARKE: Our vision going forward: as you probably know, Vodafone has recently purchased Spectrum at the recent auctions. That's the beginning of substantial further investment in the development of 3G services and applications. We're prepared to take that commercial risk, getting involved in those services and developing those services. We'll take that risk along with our business partners and those business partners will probably include facility providers, service providers and marketing experts as well as application providers. We don't consider it wise or necessary to overlay that commercial risk with regulatory risk. The future landscape - - -

PROF WOODS: You said there your partners would probably involve that, so they haven't been a party to the purchase?

MR CLARKE: No, the purchase is a stand-alone.

PROF WOODS: The purchase is your risk.

MR CLARKE: Yes.

PROF WOODS: Thank you.

MR CLARKE: I think it's worth pointing out that the investment in Spectrum is just the beginning and probably a small part of the total investment in Third Generation Services.

PROF WOODS: Okay. Sorry to interrupt.

MR CLARKE: That's fine. Future landscape: we see will see the convergence of all types of different services, fixed, mobile, wireless, broadband, broadcast, content, location based services. How and when exactly they'll develop it, I don't think anybody can be certain. They'll cross national boundaries and there won't be any artificial industry demarcation. There will be multiple access technologies and within each technology there will be multiple providers. By multiple providers, we don't envisage hundreds of providers, but there will certainly probably be some consolidation among the existing providers. At the same time there will be new entry. On top of that access layer there will be a multitude of service, content and application providers.

We don't foresee any access problems in this extremely competitive environment. Behavioural problems may or may not occur. However, if they do occur, then we think they should and would have to be dealt with under a general competition framework. Thanks.

PROF WOODS: Thank you very much. I wish to thank Vodafone for their ongoing support to this inquiry and for the submissions that you've been making during our processes. You've constantly promoted the concept of regulatory forbearance. It's been one of the singular points of stability in this inquiry and we understand your views clearly on that. You say, and I suspect largely in support of it at para 1.10 of your submission that:

Operators will behave rationally in the long run, set economically efficient prices which optimise traffic flows and generate a reasonable return on investment.

It sounds excellent and no doubt is in support of your view on regulatory forbearance. Why then is it that there are so many disputes in relation to access and access pricing in this current environment? I mean, presumably it's not just that there's regulation there that allows the opportunity for dispute; it's meant to be a fall-back and that the model is to encourage commercial resolution of issues where, as you say, operators are behaving rationally and setting economically efficient prices. There seems to be a slight mismatch between current practice and this world that we would like to live in.

MR CLARKE: Maybe if I start off. We will start with an easy question.

PROF WOODS: Might as well.

MR CLARKE: I guess there has been a lot of access disputes. I guess everybody is aware - Telstra has pointed out continually - that while there has been a lot of disputes, there's been a lot more commercial agreements struck than there have been access disputes. I think from Vodafone's point of view I guess we're quite proud of our record that we've never instigated an access dispute, we haven't found it necessary. We've managed to strike commercial deals with providers. I guess the regime that exists in what has generally been characterised by declining access prices may or must have created a perception that through regulatory gaming you may be able to accelerate that or take some sort of commercial advantage by getting an arbitrator involved.

I guess another factor is it's continually suggested that we're two, three years whatever - into a new regime and these disputes still exist. Maybe there needs to be more realistic understanding of how quickly commercial pressures will shape the market. If there is an opportunity to get somebody to intervene to force that, then maybe it's tempting for some access seekers.

PROF WOODS: When you're answering, if you could assist the gallery - - -

MR CLARKE: Sure.

PROF WOODS: - - - of keeping the volume up.

MR CLARKE: I don't know if you want to add anything?

MR STIFFE: I guess from my point of view I'd just like to emphasise one of the points that Dave made which was really that although it may not be the intention of the current regulatory regime to automatically favour progress towards disputes, nevertheless it becomes a commercial tool. So you have a commercial negotiation. Sometimes you would just treat the dispute resolution process as another part of the commercial negotiation framework and I think that is one of the risks of having that as an automatic backstop to negotiations.

PROF WOODS: Is there some way of amending the current regulatory framework to more clearly put commercial resolution to the fore and to have regulatory intervention as a last resort? I mean, I understand your point that if it's there, it's part of the tool bag. Is there some way in which it can be made more residual?

MR STIFFE: The key way to do it is to limit its application as much as possible.

PROF WOODS: Have higher hurdles to jump over becomes you can get to it.

MR STIFFE: Also to carefully look at the types of services that it can be applied to. But in a commercial market, prices are declining anyway and I think mobile termination is a case in point, that through commercial negotiation those prices have declined quite rapidly. If that's the case, then do you actually need to put a further layer of dispute resolution (indistinct) dispute resolution in that process. So perhaps one way of dealing with this is to very tightly focus the scope of arbitration to those services where there is not progress in terms of commercial negotiation.

PROF WOODS: We, I suspect, will spend a little time looking at the termination issue because - although, as you say, prices might be declining, the base is somewhat high and I suspect there's still a little way to go in getting the right answer there, but we will pick that up later in this process. You say on 114 that network effects, as described particularly in our draft report, deal more with anticompetitive behaviour than industry structure, and you feel that the focus should be more on market power and its use rather than network effects or any-to-any connectivity as such. Again, what changes would you see to the regulatory environment to focus more on this issue of market power and, if your thesis is correct, to draw less distinction on the any-to-any connectivity nature of telecommunications specifically?

MR CLARKE: Maybe if I can pick that up. Again, we've tried to make the point that we don't consider that network effects are as substantial as perhaps the commission has in their draft report. We think that's overstated, and it seemed to me that that was one of the main reasons why the telecommunications industry was being portrayed as some special industry that needed special treatment. So when we look at network effects from a practical point of view, certainly any new player that enters the market, then Vodafone has immediately got a commercial incentive to reach connectivity as soon as they have any connected customers. Any lack of content connectivity is revenue foregone on our part. Our customers can't call the

new entrance customers, which is retail revenue foregone, and similarly in the reverse direction, it's terminating revenue foregone.

From a practical point of view, the way we try and do that is initially if volumes are low we would set up transit arrangements with the new entrant. As volume is increased, critical mass is increased, then we'd move towards a direct connectivity rather than a transit, provided there are sufficient volumes as commercial incentive on both parties. So we see that the commercial incentives deal with connectivity issues and you don't need to single out this network effect or connectivity as a special reason for additional regulatory intervention.

MR STIFFE: And also in terms of the behavioural issues, our view is that there are already the tools to be able to deal with that through the Trade Practices Act anyway. So we think that provides a mechanism to deal with any bad behaviour.

PROF WOODS: All right. Let's look then at what we're defining as "the industry" because in a number of cases through your submission you talk about "the entire industry" and then sometimes you might say "the mobile market in particular", but then in other places you say:

The mobile industry has developed in quite a different way to the fixed line network.

Perhaps it would assist in our discussion this morning and in the evidence that you present to at times differentiate where you're talking about the mobile market as such versus the entire industry or attributes that relate to the fixed line network as such. I draw it to your attention in our overview that the commission argues that the focus of regulation should be on the core bottlenecks, as best exemplified by access to the local loop. We see the regulations should focus on the core disturbance and not chase the rings of the pond as the industry moves out from that point of core disturbance. So that focus is much more on the fixed line network but it would help, I think, at times if we could draw that distinction where you're talking about mobiles in particular rather than the telco industry generally. Would you agree that there are some distinguishing features? Where we talk about any-to-any connectivity and network of facts, they relate to the total of telecommunications, but the level of competition in mobiles is different from where you're talking about the local loop in particular, where clearly Telstra has and will continue to have dominance, particularly on the copper wire network.

MR CLARKE: Okay. I think it's fair to say our thinking is certainly shaped by our experience in the mobile market, but I think that thinking is equally applicable to the industry or the telecommunications market more generally. Certainly when we're talking about connectivity, we're connecting to other mobile players and other fixed-wire players and our approach doesn't differ. A small mobile network, we've immediately got incentives to establish connectivity. Similarly, with a small PSTN network we'll establish connectivity immediately or as soon as possible, and I think applying our experience and thinking to the PSTN market, we certainly couldn't see any reason why you would need to regulate a non-dominant PSTN provider. We

think if they do set, say, terminating access fees too high, then they'll be punished in the market. We don't see how that can be sustainable. As to the incumbent local loop, again we don't see any reason why that needs a specific regulatory regime to deal with it. We think it could be dealt with under a general regime. The outcomes - - -

PROF SNAPE: Quickly enough, which is a comment that has come up quite a lot - that the general regime is too slow and that in this industry we need speed because the industry is changing so quickly. Can the general regime as currently structured move quickly enough for this industry?

MR STIFFE: I think some would argue that the existing specific regime is incapable of moving quickly enough, and one of the things that we wonder is whether regulation as a tool, and particularly structural regulation, is actually ever going to be able to move quickly enough in such a fast-paced market, and that's why in our view we ought to be focusing more on behavioural issues. If someone behaves badly and uses their market power in an inappropriate way, then that ought to be dealt with very swiftly, and in our view the structural regulation doesn't actually deliver those rapid outcomes.

PROF SNAPE: But a point that's been made to us about XIB is that, even though XIB hasn't actually been used a great deal, nevertheless its existence and the penalties under it have in fact ensured that things happen much more quickly than they would otherwise do if you only had the generic competition regulations there.

MR STIFFE: I guess from our point of view we don't have any experience of using XIB, so we can't comment from our own experience, but it will always be a debatable point whether that has created any further incentive than a general competition (indistinct)

PROF WOODS: A number of participants before us have said that, although the on-record use of XIB is quite small and now somewhat historic, that there is regular traffic to the ACCC on matters that could be embraced by XIB and those dialogues prompt behavioural change, and therefore XIB is of benefit by remaining on the statute. Is that the experience of Vodafone, that the presence of XIB has been drawn upon by way of discussion with the ACCC to resolve issues?

MR CLARKE: Not that I can recollect in my experience, no, on either side of ---

PROF WOODS: For or against.

MR CLARKE: Exactly.

PROF SNAPE: I'm sorry, I interrupted you. You were going - - -

MR CLARKE: Where did we get to? I guess it appears in the introduction that our experience is not so much on XIB but on XIC, and certainly on access issues we see no reason why a non-dominant PSTN should come under a regulatory umbrella. We

think they would be dealt with by the markets if they misbehaved in any way. At the same time the incumbent or dominant player, we think, should be able to be dealt with under a general regime. Whether the outcome of that is continuing regulation in all geographic areas, I'm not sure.

PROF WOODS: Do you want pursue any of that front-end - - -

PROF SNAPE: Yes, I'd go back a little bit, I think, to 1.8, where you say:

If no natural monopoly exists the network operators will have commercial incentives to duplicate the underlying facilities if a large provider attempts to charge monopoly prices.

If in fact there are substantial economies of scale, if the natural monopoly is fairly marked - well, you're saying here that if no natural monopoly exists, yes, that's right but, if there is a natural monopoly, of course there is quite some scope for them to raise the price and behave in a monopolistic manner. It is being put to us and we've accepted in the draft report that there are elements of natural monopoly, particularly with respect to the local loop.

MR CLARKE: I think we would probably agree, but what we don't see is why that necessitates an industry-specific access regime to deal with it. If it is established that it's a natural monopoly, then we'd ask why the general access regulation can't deal with that.

PROF SNAPE: Okay.

MR KENNEDY: We increasingly see greater substitutable factors for these things that were considered natural monopolies.

PROF SNAPE: Yes, I see that too, but we do in this industry and have with the local loop - it remains a very important element. There is still an important natural monopoly associated with it. Yes, Hutchison is trying to chip away a little bit at that with its Orange-at-Home, but that's minor and will possibly remain so for quite some time. In some areas it might make a dent but generally it won't for quite some time. So, with such historical factors there in this industry and with the speed of change in this industry and the possibilities that exist in this industry, doesn't that mark this industry out for industry-specific factors? Again, it's the speed of change, the necessity of getting things done quickly.

MR STIFFE: In our view no, and the experience that we've had here and around the world as a mobile operator is that regulatory regimes that try and specifically predict the future of telecommunications invariably get in the way of the development of telecommunications. So, again, just to emphasise Dave's point, to the extent that there are still natural monopoly parts of the industry, then those should be the focus. They can be dealt with under the existing access regulations, generic access regulations, and then let the industry develop.

PROF SNAPE: Yes, I wasn't suggesting that the regulator should try to predict the development of the industry but rather remove barriers for the industry to develop as it sees fit, to remove bottlenecks and not to predict where the flows are going.

MR STIFFE: But I think inevitably, if you're trying to structure a specific regime to remove bottlenecks, then you're trying to predict where they might lie in the future and so regardless of the intent I think the effect is often that those regulations actually do influence the way that the industry develops, and in a more constrained way than the industry might develop if it was left to its own devices.

PROF WOODS: In which case you identify in 122 a range if things like wireless, local loops, fibre-optic networks, satellite services and the use of existing electricity networks. I must say on that last one we've also been reading a little bit, but I don't know if you have any further evidence as to whether that's about to revolutionise the telecommunications market or not, the electricity network one, or was that just thrown in the list?

MR STIFFE: I think none of them on their own will revolutionise the telecommunications market, but they are certainly examples of many things that are going on that will influence the development of the telecommunications market.

PROF WOODS: Putting electricity to one side, at the moment what is the prospective development within Vodafone that in itself will help challenge the dominance of the local loop? Where are you heading in your wireless industry that will progressively reduce the monopoly characteristics of the copper wire, the local loop?

MR CLARKE: I think a simple observation to make, which is pertinent to both Australia and other jurisdictions but perhaps more particularly Europe, is just to look at the penetration rates in the market shares. As mobile penetration rates continue to increase, we see more and more traffic. Certainly more and more traffic to Vodafone originates on other mobile networks not on the fixed network. So there is a shift from PSTN traffic to mobile traffic where you have - - -

PROF WOODS: Is that a rapid increase from a low base or is that actually now a significant component of your business?

MR CLARKE: I won't comment on Australia, but Australia is not too different from most European countries, where it's now got to the stage that more traffic to mobile networks originates on mobile networks than originates on the fixed network. So there is a significant shift.

PROF WOODS: When we're talking data, of course, everything is still predominantly focused on fibre optics and fixed wire networks.

MR CLARKE: That's true presently.

PROF WOODS: You mentioned earlier about convergence and we're talking

telecommunications generally not voice specifically. In fact, voice is but one component of the totality and becoming, I suspect, a decreasingly smaller component of that totality. So I understand your point for voice, but presumably Vodafone has views about the development of data as well as voice.

MR STIFFE: That's why we've invested in the 3G spectrum and that's why we continue to invest in services like GPRS, which are data services on our existing networks. Our view is that we want to claim as much as we can of the business that is done on telecommunications networks, and we certainly intend to try and eat Telstra's lunch in data as well as voice.

PROF WOODS: Perhaps if you could outline a little of your 3G strategy, that would help us put this conversation into perspective.

MR STIFFE: It's a little difficult to try and predict how 3G is going to work because the services don't exist yet. So this is one of the risk areas for us where we're making investments today on the basis that we believe that we will be able to compete in the future. A lot of that is starting to firm up now though. We would expect to see services being more packet based than circuit switch based. We see the data speeds increasing. I doubt that you'd ever see the situation where mobile networks and 3G networks ended up replacing fixed networks, but I think they will co-exist and they will become a real constraint on the development of fixed networks.

PROF WOODS: Particularly at the small business and household end presumably. I mean, for big business, for large data transfers, you'll still always have your interstate and international optics that send it along - - -

MR STIFFE: You'd expect so, yes.

PROF WOODS: --- but, presumably at the lower volume end, you're saying that wireless will start becoming a real competitor for ---

MR STIFFE: And even in terms of medium volumes as well we would expect to see that customers - and customers' use of data will change over time as technologies change and they find new services that they can get the best of.

PROF SNAPE: While we're on new technologies, what about the satellite system?

MR STIFFE: I think that again is going to remain an important part of the telecommunications fabric that has a place. It's not going to be all things to all people but it will still be an important component of telecommunications.

PROF SNAPE: You're not really getting into the very wide band width in any part of your operations then?

MR STIFFE: What do you mean by "wide band width"?

PROF SNAPE: In the band width you could get with fibre optics, for example, you're not approaching those with any of the wireless systems that you have?

MR STIFFE: Not that Vodafone is likely to be operating in the medium term but again we believe that customers will be looking for services that they can use well, not just band width. So, even though the pipe might not be as big, if it's big enough for the customers then it will still play an important part in their telecommunications usage.

PROF SNAPE: I'm thinking of wide band width in rural areas in particular. You're not really into that in any of your operations?

MR STIFFE: Where we have coverage, I guess. So there will always be a mixture of technologies.

PROF SNAPE: I'm going to head into access holidays. Are there matters before that? Well, we're about to go into access but before going to access holidays, perhaps I could pick up on something that you said in your introductory remarks to vision, when you said you weren't worried about access. Are you worried about access to content as you are thinking about your 3G and what have you in the future?

MR CLARKE: Are we worried? Content is going to be important and I guess we don't foresee problems getting access to content to deliver the services to our customers but of course they'll be a prime concern, yes.

PROF SNAPE: So for the sort of content that you require for what you foresee in 3G, there are no bottlenecks there?

MR CLARKE: Not that we're aware of, no.

PROF SNAPE: I'm thinking particularly of the points that Optus have been making about the problems that they can see, what they argue would be monopoly control on content and the problems that that would pose for them, as they argue, in driving a viable package into rural areas in particular, but you don't see that same problem in any of what you are envisaging packaging together or providing through the 3G future?

MR STIFFE: I don't think we see any enduring issues in terms of access to content. I mean, there will always be different players that have access to certain things that you might like and I suppose it will have access to other things, but there are always points of leverage, in our experience, to be able to move forward in a commercially sensible way.

PROF WOODS: On access holidays you make a point that if the declaration criteria are so structured then anything that is new and innovative wouldn't fit the criteria of national significance or economical and feasible to duplicate etcetera. That's a useful perspective and we'll certainly take that on board in our thinking. Can you give some view to the commission, though, as to how important new investment

is likely to be relative to the ongoing investment in maintaining, upgrading, augmenting the existing networks and facilities? I mean, where does the bias lie in the investment future?

MR CLARKE: I guess one of the types of services that are just starting to develop are location-based services. Certainly we wouldn't see any requirement to regulate access to, say, location data, as an example.

PROF WOODS: Can you clarify what you mean by "location based" or "location data"?

MR CLARKE: I think a feature of a lot of new networks or services will be an ability in the mobile environment to distinguish where the customer is actually located or some sort of - - -

PROF WOODS: Is this the Orange-at-Home type concept or different?

MR CLARKE: I guess that's one example but you could subscribe to certain services which only generate some sort of transaction or some sort of information flow when you're in a certain area. That's logical.

MR STIFFE: An example of a service that can be offered is a "where's my nearest?" type service, so you send off a request to the network using SMS or WAP type services, "Where's my nearest bank?" or something like that.

PROF WOODS: If you needed a pair of socks you could dial up your mobile and it would tell you where the closest shop is?

MR STIFFE: Indeed.

PROF WOODS: Very helpful.

MR STIFFE: Those services are emerging now and are being used.

PROF SNAPE: We should take that on board because it's something I needed yesterday.

MR STIFFE: I'm not sure if there's a "Where's my nearest sock store?" just yet.

PROF SNAPE: No, it would have been very valuable. It would have saved me a lot of time.

MR STIFFE: Indeed.

MR CLARKE: Well, I guess that's a very simplistic example of - we don't think anybody would suggest at the moment that somehow they should be declared so there's universal access to any application provider who wants to develop a service, particularly where if you get the declaration criteria right they wouldn't be declared.

But to have some sort of regime where you expand the declaration criteria but somehow provide for access holidays so if somebody does develop such a service they have immunity from that declaration for a period just seems counterproductive. If you get the declaration criteria right there would be no risk of future declaration and investments will be made. I think that's the sort of, I guess, simplistic application of the argument that we're putting forward.

PROF SNAPE: Could I raise the point that Telstra referred to a couple of days ago on the access holidays - and it was arguing in relation to the digitisation of pay television - that there was a significant risk of it being declared and that that risk of declaration was in fact inhibiting them from going in that direction, that it could in fact be discouraging that investment, and that analogue cable has been declared and they could see a possibility of digital. So would you not agree that in those circumstances an access holiday, if their argument is correct, may permit that investment to go ahead with the at least some of the benefits it would provide?

MR STIFFE: Doesn't the access holiday simply reinforce the risk that there will be regulation in future because it is implying, "There is a need to regulate but we'll give you breathing space"?

PROF WOODS: It leaves undecided the question of declaration. It doesn't presume declaration; it just gives certainty at the front end and leaves open the question of declaration to a later date.

PROF SNAPE: Just like a patent, doesn't it mean that the thing will be copied seven to 20 years hence or whatever but it assures you that it can't be over that period and thereby gives comfort?

MR STIFFE: But again, if there is reasonable certainty up-front that you are unlikely to be regulated or you have reasonable certainty under the declaration criteria that a new service won't be regulated, then that would provide even more investment certainty.

PROF WOODS: Is this consistent with your general approach in your submission to the commission - set very high hurdles and allow very little through? I thought so. You don't strongly favour the idea of multilateral arbitrations and in fact you put up three arguments. One is that they would be giving the arbitrator a series of different chronologies of events. Well, true, but I don't actually see that that's a great inhibitor to the process. The second is that different proposals may have been discussed between parties, and that's relevant because the multi-party process would be disclosing that to other parties, but I see that as a one-way risk for the access provider. But if access seekers collectively agree to being part of a multi-party arbitration, then they understand that possibility and are prepared to accept the consequences of it, so there's only a one-way risk in there. Then your third point:

It is unlikely, given normal commercial negotiations, that all access seekers would have the same viewpoint. True, but they enter into this voluntarily and again agree to cope with the consequences. So I don't see that your three arguments actually amount to a strong case not to have multi-party arbitrations where there is consent by access seekers to join together in this process. Is there any further thinking that you've been giving to this issue?

MR CLARKE: I guess it's not something we feel as strongly about as some of the other areas we've commented on, but I make the point that in the arbitration process where there are similar arbitrations, if it's the same service being sought and the same provider, then we would certainly support any mechanism that can streamline that to the greatest degree possible: run them in parallel. The actual procedures should be similar. The sort of submissions and the arguments that an access provider is putting would probably overlap to a great extent, so I guess we would favour parallel proceedings. Minimising any overlap and any duplication of resource we think would be a better way to go than actually co-joining the parties in the arbitration and what sort of commercial disclosures that may result in.

PROF WOODS: Thank you.

PROF SNAPE: I'd like to pick up the disclosure, given that I notice you've marked the same sentence.

PROF WOODS: Yes, you start on that one.

MR CLARKE: Sorry, I guess one more point is it might actually encourage more arbitrations if an access seeker can just co-join to an existing arbitration, which we think would be undesirable, but that's probably a minor point.

PROF SNAPE: It is stated in paragraph 3(11) - and I notice we've both marked the same sentence here:

If a party claims a piece of information as commercial-in-confidence, then it should be treated as such.

Perhaps I could indicate the Productivity Commission's processes on this and see if you would be satisfied with the same processes in this case. I can think of a number of inquiries that I won't specify in which there would have been very few there would be fewer submissions in the public domain if in fact we had adopted that sentence. I'm afraid what happens on occasion is that a party will say, "This submission is commercial-in-confidence," and we have within our act provisions for the treatment of submissions that are commercial-in-confidence but we also can reject a submission and say, "Our submissions are public. We don't accept that that is commercial-in-confidence," and so we say, "We can't accept that as a submission, that is, as an input into our deliberations, because we don't think that that is commercial-in-confidence and we have a prime responsibility to be open, as open as we can. The whole procedure is a public procedure except where it is really commercial-in-confidence." So we get a bit of negotiation going back and forth and finally what comes out generally is that what is really commercial-in-confidence, the figures, the few figures or the page, will in fact remain as commercial-in-confidence but the rest of the document will in fact be in the public domain. Now, your sentence in fact as you've written it would not allow that. But we've found that that's been in several inquiries a reasonable procedure and finally, with the staff talking to people, it's a fully acceptable procedure but is more reasonable, if you like. It keeps things in the public domain. In this case the sanction from our side is that we won't accept that information, we won't use that information which we think is not commercial-in-confidence.

MR STIFFE: Isn't there a difference though between a submission and an inquiry-type process, a difference between that and a bilateral commercial arbitration where you're joining - - -

PROF SNAPE: Well, it could well be that there would be a lot more commercial-in-confidence in such a situation.

MR STIFFE: Sure.

PROF SNAPE: I'm just saying that it's not leaving it to the party who is supplying it to make that judgment.

MR CLARKE: I think there's also a difference between, let's say, the ACCC negotiating with private parties about what information would be released and the ACCC making unilateral decisions or decisions about what information it would release without consulting the party, if you like, or making its own judgments about what's commercial-in-confidence.

PROF SNAPE: But there is that middle course which I've just been outlining, which I think would probably get a lot more into the public domain but nevertheless would draw the line - that both the arbitrator, ACCC and the party finally agreed it really was commercial-in-confidence.

MR CLARKE: I think any differences are a difference of degree rather than total opposition. Certainly we would support the ACCC disseminating as much information as it can to the industry. We think it would assist the commercial negotiations. I think it's just where the line is drawn, that if you have during the arbitration process disclosed something thinking it was commercial-in-confidence, to find out at a later date that that could be overridden, then we have a problem.

PROF SNAPE: No, we wouldn't expect them to give shocks like that, nor do we.

MR CLARKE: Yes.

MR STIFFE: I think we're actually reasonably consistent on that point and it may just be a difference in expression perhaps.

PROF WOODS: In para 3(16) - - -

PROF SNAPE: I think it's something we're quite sensitive to, I might say, yes.

PROF WOODS: Your section 3(16) is closer to our view, talking about prudent management of information et cetera. It was just the very absolute nature of that sentence that attracted the two of us immediately, and perhaps in any further submission to us you might want to put the appropriate caveats around it. On the question of termination rates, as I foreshadowed, it's something that we'd be happy to spend a little time on. You have identified it as a problem. You do say:

We consider that the problem has come about due to the structure of the preselection service combined with the relative newness of the competitive market.

So there are the two arguments there, the preselection service and then the second argument, being the relative newness of the competitive market, and you were saying in your opening comments that in fact the termination rates are coming down. You do say, however, at the front end of your submission, if I can find it quickly, about mobiles in Australia:

The multitude of service providers has created one of the most competitive mobile markets in the world.

So you're saying we've already got there because we've got one of the most competitive mobile markets in the world. I ask you to compare that with your statement about the relative newness of the competitive market. There seems to be a bit of tension there. Also if you could put on the record how long Vodafone has been in this market, that would give a third piece of perspective to just where the market is at and why it's taken so long for this question of termination rates to - - -

MR STIFFE: Perhaps just to start off - and I'll hand over to Dave - the market as we see it is the mobile services market and termination is but a part of that so, when we talk about a very competitive mobile market, we're considering the totality of that market. We certainly acknowledge that things like preselection are quite new, so that there's probably development and that piece of it, but the market generally is very, very competitive.

MR KENNEDY: When we talk about newness, we're actually referring to the fixed-to-mobile retail market, not the mobile market, if you like.

PROF WOODS: I think it's a little unclear, isn't it?

MR CLARKE: Yes, I think it's just a problem with clarity. I think the intention there was to - the newness is the newness of the addition of fixed-to-mobile to the preselection basket, which I think occurred September 99, so a different time period to development of the mobiles market. We see some problems, and it's less than two

years ago that fixed-to-mobile was added to that basket of preselectable services, but from our observation the competition for the preselected customers has continued to focus on international rates predominantly and, perhaps to a second extent, domestic long-distance rates. As that market develops further, I'm sure there'll be a greater focus on the fixed-to-mobile component of that preselection basket which will then ensure that the decreases we've seen in mobile termination rates flow through into the fixed-to-mobile retail rates. That's the point we're trying to make.

PROF WOODS: What has been the stickiness? Has it just been the fact that we've got some comfortable players in the marketplace who are happy to be taking this revenue stream, or is that a little unfair?

MR CLARKE: I think part of the problem, and we think it's a short-term problem, is when fixed-to-mobile was added to the preselection basket those preselection providers didn't have to compete for that traffic stream; it was just given to them. Naturally it takes a while for competitive forces to flow through and impact on rates in that particular revenue stream.

PROF SNAPE: I might add that those rates are giving concern in some quarters, and I'm referring to some welfare agencies who have always been concerned about having telephone services in particular at a reasonable cost and of course have been also concerned about having untimed calls on the fixed service, but recently in some consultations we had the point made that with the mobile service growing so greatly, there was concern about people who had few resources.

A concern, I think, is to do with the fixed-to-mobile termination charges, or the fixed-to-mobile charges, that it's all very well to say on the one hand, okay, they still have access to fixed lines which are untimed when it's fixed-to-fixed, but of course if they have to ring a mobile number, and with more and more people ringing mobile numbers, that starts to get expensive. With the costs of the fixed-to-mobile terminating charges, of course that is making a significant effect upon the budget. To get the any-to-any connectivity is in fact of concern to these welfare groups. So this was the first occasion on which I had heard this message, but I'm just saying that I think that it is something on which you may feel some pressure.

MR STIFFE: Certainly in a competitive market we feel pressure in all sorts of areas, but again to believe that there are something like monopoly rents being taken from fixed mobile calls by the mobile operators - I don't think you would see the efforts made that are being made today in the market to improve efficiencies to actually try and make a reasonable return for shareholders. There aren't monopoly rents being earned. What you do see though is that the mobile operators are trying to grow their business in the best way possible, with the resources that they have, as a total service, and if the termination rates were artificially dragged down, then that would impact on other parts of mobile business.

PROF SNAPE: I understand that point, but I'm picking up the point where you said it takes time for the competitive processes to work through. That argument may not cut some ice with some welfare agencies that are concerned about the equity

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considerations or distributional implications for those at the lower end of the income - - -

MR CLARKE: But I think I would re-emphasise my point that, if that is a problem for customers, then they should be making their choice of preselection provider on the basis of their price for fixed-to-mobile calls. Now, I don't think that has happened to date, but it's probably starting to happen, given the penetration rates of mobiles, and if customers do make their choice of preselection provider on the basis of the fixed-to-mobile retail call price, that will just increase the competitive pressures at that retail end and we should see some price decreases.

MR STIFFE: Because this is a retail pricing issue as opposed to a wholesale pricing issue, I think.

PROF SNAPE: Yes.

MR STIFFE: We don't have any influence over how retail prices are set.

MR KENNEDY: One of the points we would make is that we've done some research on relative costs of fixed services and mobile services for low income groups, and for some low income groups it's actually more beneficial to get rid of a fixed line and use a low plan, and it actually works out cheaper, a mobile-to-mobile call as an alternative to a fixed-to-mobile call. We're happy to provide you with that information. We've given it in a previous inquiry.

PROF SNAPE: Even if the mobile that you're calling is on a different system?

MR KENNEDY: Yes.

MR STIFFE: If you take excess charges and calling charges, both of those into account.

PROF WOODS: Yes, and your views on multi-basket preselection would be consistent there.

MR CLARKE: Yes, an obvious solution is to go to multi-basket where you make the fixed-to-mobile a separate basket. I guess we're cautious about that sort of approach. It might bring some short-term benefit, but I don't know what the cost of doing that multi-basket would be for the preselection providers. It may be a large short-term expense which doesn't have a long-term benefit.

PROF WOODS: But it would certainly focus the competitive pressure on that element much more clearly. I mean, at the moment where the market is being driven by getting your overseas call at a very cheap rate etcetera, the multi-basket really does allow the marketplace to focus on that particular issue.

MR CLARKE: Yes, and at the end of the quarter you look at the number of calls you placed to international destinations versus the number of calls you placed to

mobiles. Maybe it's better that the focus is on the retail fixed-to-mobile price.

MR STIFFE: Interestingly, in New Zealand, where preselection of calls to mobiles is something that is about to emerge, it would seem that they are going for the multi-basket approach, and that is essentially an industry decision as opposed to a regulated requirement.

PROF WOODS: So they're saying they can cope with the investment requirements to achieve that outcome in a network sense.

MR STIFFE: It would appear to be the case, although the discussions haven't ended yet.

PROF WOODS: Delay is a feature of the industry, isn't it?

MR STIFFE: Well, there is a regulated requirement that preselection of some sort is in place by the end of the year, but I think the interesting point is that, rather than just assuming that it would be a multi-basket that you'd end up with, you'd end up with separate preselection for mobile.

PROF WOODS: Yes, maybe two - at least identify that as an individual component.

MR STIFFE: Yes, and one of the arguments that was made there was: why should a customer's existing opportunity to take service from a particular toll provider then automatically assume that they would take their mobile service from the same provider?

PROF WOODS: No, that's very helpful. On questions such as industry development plans and the like, I notice we've got a strong similarity of viewpoint. You talk about the facilities access regime and you say:

One of the likely benefits of greater non-carrier ownership is that these companies will have strong incentives to promote infrastructure sharing.

You were talking mobile towers in this case, and then you have some interesting arguments:

This is likely to reduce capital costs across the industry and reduce the risks of anticompetitive behaviour.

Are those the sorts of arguments that anyone who was proposing separation of Telstra would also apply? Do you have any views on that? I would remind people of our terms of reference that require that we don't encompass the structural separation of Telstra in line with government policy on this issue, but it's a benchmark position that we can have a discussion about.

MR STIFFE: I'm not sure. I mean, the way we've approached it, I guess, is that the

forefront of our thinking has been the mobile towers. The relevance of that to Telstra's structural separation I'm not sure of. I guess the point we're trying to make was we're not sure you need a specific regulation in telecommunications for access to towers, and it's sort of self-defeating if the owners of those towers are outside the scope of the reach. So maybe you should be resorting again to general competition law, but maybe there's not an issue anyway.

PROF WOODS: You're giving strong argument as to how the development of focused infrastructure owners has been good for the industry and for cost structures generally: because they're open access, they'll rent out space to anybody who happens to want to put up a dish provided physically. It's possible etcetera, which is very different from the front end of the industry, where people have individual towers and you're having towers next to towers, and who owned what footprint and where they're to go. So the industry has developed significantly, I think would be your proposition here. Is that correct?

MR CLARKE: Yes, and it's effectively an outsourcing arrangement. It allows you to concentrate on where you really should be concentrating and apply your investment resources where they really need to be applied.

PROF WOODS: Yes, and it's been more efficient as well in having that form of open access, I think is your argument.

MR STIFFE: Indeed, and I think it allows firms like Vodafone to focus on differentiating their services and competing strongly and recognising that owning a tower actually isn't going to provide you much competitive advantage.

PROF WOODS: That can then be rolled through to looking at companies who are interested in providing open access networks and cabling of provincial centres and the like. The same arguments would apply in those cases. It's then just a matter of how far you take that argument all the way to - - -

MR STIFFE: Indeed, although again I just refer back to one of the earlier statements that we made, that regulating those non-dominant providers, for example non-dominant PSTNs, is likely to diminish their enthusiasm for rolling out network.

PROF WOODS: I understand that as well. That completes the matters that we wish to raise with you in this hearing. We again thank you for your submissions and the time you've made available and look forward to any further rejoinders that you may wish to make, although we would ask that they come in certainly before the end of June to allow us to complete our report in a timely manner. But are there any other matters that you wish to raise before the commission?

MR STIFFE: No, not at this time, and thank you once again for hearing us today.

PROF WOODS: That being the case, I'll adjourn for five minutes. Thank you.

MR WOODS: Thank you, we will resume the hearings. Our next participants are from Network Economics Consulting Group. Could you please identify yourselves and the positions that you hold.

MR ERGAS: My name is Henry Ergas. I'm the managing director of NECG and I'm joined here by my colleagues.

DR WARREN: Tony Warren, principal at NECG.

MR KUYPERS: Tim Kuypers, principal at NECG.

MS HARDEN: And Alexis Harden, principal also at NECG.

MR WOODS: Thank you very much. Do you have an opening statement you wish to make?

MR ERGAS: Yes, thank you, chairman. Before I get into the substance of my presentation today, let me make just a few opening clarifications, as it were. The first point that I think it's important to clarify is that NECG has done a substantial amount of work for parties with direct interests in these proceedings and in particular for Telstra. We have also worked for the owners of the two other major telecommunications infrastructure operators in Australia in the form of Telecom New Zealand, which is the owner of AAPT, and the owner of Singapore Telecom, who seem set to become the owners of Cable and Wireless Optus. However, our remarks today are very much our own. They're not intended to reflect the views of any of those parties, they're our own views on the major issues that you are grappling with.

A second point I should make is that we are extremely supportive of the broad direction you have adopted in your preliminary report. Even though there are aspects of it with which we might disagree, we think that on the whole the approach adopted is an excellent one and I would like to congratulate you and the secretariat of the commission for what seems to me to be a very valuable contribution to the debate. The report that you've released canvasses a very wide range of issues and lists a number of recommendations, some more general, some very detailed, and it really wouldn't be possible in the time available to us today to go into those in any depth or detail. All I will try to do in my opening statement is to touch on a few issues that seem to us particularly important, really as a basis for a discussion, and clarifying perhaps the areas where we would hope to make further contributions to your work as it progresses.

So what I want to do is concentrate on three sets of issues, which are, first, the importance of getting the telecommunications regulatory regime right. Secondly, I want to look at the role of pricing principles in getting it right and then finally I'd like to look at the rather specific but important issue of tendering for a universal service obligation. Let me start with the importance of getting the access regime right. The other day you raised the question of where is the Australian telecommunications system going, what is the broad direction of the future, what is the vision that one

might reasonably have for where we will be in five, 10 or 15 years. The question is a sensible one and it's one which has been at different points in time addressed in the course of inquiries into the Australian telecommunications system.

Indeed, when the predecessor organisation to Telstra, Telecom Australia, was established in 1975, one of the first things it did was to commission a major study called Telecom 2000, and the Telecom 2000 study is actually a very good piece of work in many respects. It's striking how some aspects of it are really more accurate than you might have thought was possible in an area where technology changes very quickly. Even then, just when the first cellular mobile phone system had really been patented - it wasn't in use - the projections set out in Telecom 2000 estimated that if a cellular mobile phone system was developed and if costs for key components could be brought down in line with cost transfer integrated circuits, then it wasn't unreasonable to suppose that by the early part of the next century, we would have as many mobile phones as we have fixed lines in operation.

So when you go back to read Telecom 2000, it shows that if you put good engineers together and they're willing to contemplate different scenarios, some of those scenarios will make sense. But it's also true that Telecom 2000 got many, many things quite wrong, both at the technical level and perhaps even more strikingly in terms of the implicit assumptions about what would happen to telecommunications supply. In particular, they never queried the idea that in the year 2000, telecommunications would be supplied in Australia by Telecom and only by Telecom. That never even seems to have crossed their minds. So the market structure and the way the market worked and the impact that that had was really quite exogenous as far as they were concerned, a black box that they didn't need to deal with. That in turn fed into what they got right and what they got wrong.

So they really did not and quite arguably could not foresee that data communications would not develop on the hierarchical model of the PSTN, or the public switch telecommunications network, but rather that data communications would develop in a much more decentralised environment based on the Internet and on the Internet protocol. Now, the beauty of the market relative to central planning is that in the market you don't need vision, you don't need to be capable of making the correct forecast of the future, because if your forecast is inaccurate, then market forces will work to correct the errors that you have made, and to my mind it's there that we really need to focus today.

It's clear from the work that organisations such as the ACA and the ACCC have done that there are a wide range of technologies that are available and potentially of relevance. The ACA, for example, has taken the view that with respect to USO customers, the customers who are uneconomic to serve, the most efficient way of providing service is by means other than copper pair, at least for many of those customers. There's issues about whether, within those alternatives, it's some kind of fixed-link system like a wireless local loop, or a mobile system such as perhaps CDMA that will prove in in the long term. But clearly in the ACA's own mind and I would say in that of the ACCC, it's apparent that there's a range of technologies out there and some of them seem likely to be more competitive than the ones we currently rely on.

So the crucial question is whether the incentives will be there, whether the price signals will be there that will guide that choice amongst technologies and also allow any errors to be corrected. Our concern, and that's what we will focus on today, is that without reforms of the kind that you propose in your draft report, distortions to price signals will not create the right environment for technological change, technological selection and the development of markets going forward. A key issue in thinking about the regulatory environment that we have and ought to have is how we deal with regulatory risk. Risk is a factor in all markets and commercial risk is a reality of life, all the more so in industries such as telecommunications where technology and demand are changing very rapidly.

The question is how the regulatory framework that we impose on that industry then alters that risk and by altering that risk changes the incentives and the price signals that would otherwise guide marketplace decisions. I don't want here to go into immense detail on this issue. But it is useful to think it through and to try to assess some of its consequences. Looking at regulatory risk, it's conceivable that you would have regulatory regimes which had very clear bright-line MS straitjacket rules in which regulators had no discretion. If you had such rules, then the effect of that rule would nonetheless be to impact on the ability of firms to manage uncertainty because those rules would constrain the decisions that firms could take and in one way or the other limit their ability to optimise against the volatility that inevitably occurs.

At the other extreme, you could have systems in which you had pure regulatory discretion with no rules, and in those systems the regulatory uncertainty would add to the costs of any constraints by its impact on overall unpredictability. Now, in practice, all regulatory arrangements will have some rules and some discretion, and it's that mix of rules and discretion and the resulting uncertainty that is relevant to thinking through the impact that regulation has. We think of regulation as ultimately reducing firms' flexibility and by reducing firms' flexibility it will eliminate some of the means by which firms could otherwise cope with the uncertainties that are inherent in a rapidly changing environment.

The uncertainties associated with regulation are made all the greater by the fact that inevitably regulators err, and one of the issues that arises there is it's often said to us, "True, regulators err but so long as they err more or less symmetrically, why won't that wash out?" Why should regulatory risk, much like you might under or overestimate demand, wash out? The reality of it is that to the extent to which regulation truncates the upside without eliminating the downside of the firm's profitability, then its overall impact must be to reduce the estimated value of the firm.

Now, in our view it is conceivable that some forms of regulation would fully insure the firm against risk. The classic example would be perhaps textbook rate of return regulation where the firm in a sense bears no residual income risk. The regulator ensures that the firm would always earn its required rate of return. But that isn't the type of arrangement that we have in any of the Australian regulated industries, and as a result of that there is a residual impact of regulation on the expected earnings of the firm, on its expected cash flow and potentially on its cost of capital, and unless that residual impact is taken into account the firm will not face the appropriate incentive to invest.

We have taken the view that regulators ought not to attempt to fully insure firms. We think it is appropriate for firms to bear and to continue to bear some of the downside risk associated with their decisions. In particular where firms take poor commercial decisions, then they should bear the consequences of those decisions and, if they don't, the incentives for the owners of those firms, be they in the public or in the private sector, to monitor managerial performance will be blunted. So we don't believe that the regulatory arrangements should prevent the firm and its owners from facing the consequences of their decisions, but what they should not do is add to the costs that those marketplace risks necessarily entail by an element of regulatory uncertainty which is not anticipated or covered off on in the allowed return to investment.

So our approach is to assume that in the presence of this risk, as in the presence of other risks, firms need to be in a position to insure against that cost, though they need to bear that cost, and that the regulatory arrangements used, in particular in the determination of access prices, should take account of the costs that that uncertainty creates. The particular approach that we believe is probably best suited to this is an approach in which firms are compensated for foregoing the option that they would otherwise have with respect to the timing of investment. Where firms are subject to an obligation to supply and the resulting obligation to invest, and hence have no discretion over the timing of that investment, the loss of that discretion needs to be taken into account in setting the allowed return to investment for that firm.

Now, in at least one of the submissions that you have received, it has been argued that the effect of regulatory risk may be to deter or delay investment but that that deterrence or delay is less costly to society than would be the cost of advancing it by more fully compensating the firm for its cost of capital. The argument, though not fully spelled out, seems to be that the delay associated with investment is reversible and, because it's reversible, the social cost of not investing sooner can ultimately be corrected. The consequence or inference drawn from this argument is that regulators should err on the side of low access prices rather than high access prices. We believe this argument to be seriously, indeed fatally, flawed.

It seems to us it conflates two separate decisions. The first is a decision about the broad nature of the regime and the second is a decision about the implementation of that regime in particular instances. A regime that was based on the recommendation made by those proponents of this particular view, that is, a regime that was designed to err on the side of low rather than high access prices, would not be readily reversible. Such a regime, if that was a systematic feature of the regime, would be perpetually engaged in incenting under-investment relative to the level of investment that was socially desirable. Even putting that aside, the argument is flawed because its underlying premise is incorrect. Its premise is that the social costs of delay are small relative to the benefits that can be secured by investing later. What that argument necessarily assumes is that the lost welfare, ie the lost consumer and producer surplus from under-investment, is itself relatively low, so that in a proper social cost-benefit analysis, even though those welfare costs are borne right now, and hence with any reasonable discount rate will have a relatively higher weighting, those social costs can be offset by investing on the basis of whatever superior information may be available later.

Now, in practice, in infrastructure industries such as telecommunications, where by and large there are few substitutes for the service and the social surplus associated with consumption is high, the social costs of inadequate supply are likely to be commensurately large. That's obvious if you think of some of the most recent instances of supply outages and the calculations made in those supply outages of the value of lost supply, the value of lost load, for example, in an electricity network. It's clear that true it is that Mercury Energy in Auckland was within a space of three months able to restore supply and provision for future growth, but the social costs of not having supply for that three-month period was surely extremely high relative to any benefits that might have been obtained by the delay that they had accepted in renewing and replacing their underlying transmission assets. So the argument that the private costs of delay are identical to the social costs of delay and that those social costs of delay are low to my mind is economically unsupported. Finally, we know that any rule such as that that is proposed here must reach both dynamic and allocative efficiency, whereas the alternative rules that we believe you have correctly argued for are far more likely to be consistent with the welfare criteria.

Let me also deal with another argument that has been put to you, and that is this. It's the argument that removal of the price caps on basic access and local calls would be in a way sufficient to address the problems that arise in respect of current investment incentives. We would strongly agree with the view that reform of the price controls would significantly improve incentives for efficient investment. However, we recognise that such a reform would require substantial changes to line rental charges and we also recognise that, rightly or wrongly, for many consumers, and particularly residential consumers, the fact of life is that the increases in line rentals would not be offset by plausible reductions in call charges. As a result, we believe that the political reality is that reform of the price control arrangements is certainly not likely to be immediate and that hence, even under the most optimistic scenario, the distortions associated with the price controls are not likely to be materially removed in the near term.

Even if our views were too pessimistic, and I would sincerely hope that they are - but then again I can say in exoneration of that that one of my more dubious distinctions is that of having had the role of convincing the former board of Telecom Australia of the merits of timing local calls - even if our view of the price control arrangements and where they're likely to go proves too pessimistic, it also seems to us that the reform of price control arrangements would not in and of itself resolve the distortions that arise from the incorrect pricing of access. If access to the incumbent network is mispriced, then that will inevitably distort the build-buy decision, both for the incumbent and for its competitors, and that will be the case even if retail prices are themselves undistorted. As a result, though we would strongly support reform of the price control arrangements, and would endorse your own calls for such reform and hope that they will be restated and amplified in your final report, we do not believe that reforming retail pricing is sufficient to address the problems that the failure to get access pricing right will create and in our view will inevitably create.

Now, if we are to get access pricing right and have a regulatory system that works better overall, we believe - and here we echo your own views - that clearer pricing principles are needed than those provided for in the current legislation. In our view the current legislation in fact provides no guidance to the regulator on how access prices should be set. That in our view inevitably creates great uncertainty about access prices going forward, and that uncertainty has, we believe, at least two effects. The first effect is that it weighs on investment decisions and it means that the social cost of capital of investment in telecommunications is higher than it needs to be.

The second consequence of that uncertainty is that it makes it extremely difficult to resolve access pricing issues through commercial negotiation. We believe that if there were clearer pricing principles, then many of the pressures that currently bear on the arbitration arrangements would be materially eased and we could in fact have a regime that was in practice as well as in theory more self-regulatory. The fact of that uncertainty is obvious when you look at the types of estimates that the regulatory process has generated for key components of the costs of major declared services. This chart shows you the viability in the ACCC's estimate of the total service long-run incremental cost of the inter-exchange network. The next chart shows you those estimates for the access deficit component of the charge for originating and terminating PSTN access.

In fact, you will be pleased to hear that if you take this particular chart and apply standard statistical tests to see whether it's the result of just random draws, sequential random draws, from the estimate that Telstra presented to the commission at the outset of the undertaking process, you cannot reject the hypothesis that these are just random draws around the Telstra number. A regulatory process that, over a period of many, many months of work and literally millions of dollars of costs on regulation acts like an earn scheme or a random number generator around the input provided to it is, we would submit, one that is in need of greater guidance and firmer pricing principles.

We therefore welcome the commission's idea of new pricing principles but our own view is that the commission's specific proposals - and we will elaborate on this in written submission to you - could be materially improved. We have the concern that the commission's own proposals though, a step forward from the present situation, do not go as far as necessary. In particular, we would stress that three elements should come out in the pricing principles which are a requirement for financial capital maintenance, a requirement for compensation of regulatory risk and a clearer recognition of social obligations.

Let me briefly turn to financial capital maintenance and emphasise that we do

not see this as full insurance. We simply see it as a requirement that investors in regulated assets, where the prices of those assets are going to be set by the regulator, should have a reasonable expectation ex ante that the amounts invested if prudently invested will be recouped. It seems to us that no regulatory system is sustainable in the long term if investors do not have that expectation because if that expectation is not met, then there must be a likelihood or at least the possibility that investors will be expropriated. If there were such a principle in place, we believe that the decisions taken would have differed in important respects from those that have actually been made. We illustrate that with respect both to PSTN pricing and with respect to the pricing of the local call service, the local call service.

In particular, and most strikingly, we do not believe that a regulator that was constrained to respect the principle of ex ante financial capital maintenance could reasonably set the price of originating and terminating access on the basis that each local call would recover about 22 cents at wholesale and then set the price of wholesale local calls on the basis that each local call would recover 17.4 cents because that inconsistency is manifestly at odds with ex ante financial capital maintenance, that is, with the ability of investors to recoup investments prudently made.

We also believe that any such principle would more readily direct the regulator to providing adequate compensation for regulatory risk and I have already discussed the manner in which that compensation might be provided. The final element that we have stressed is that of a recognition of social obligations. We are struck by the fact that the ACA, in considering the costs that Telstra must incur in providing service in country areas, has built in estimates of annual rates of cost decline that seem to us enormously at odds with actual experience of total factor productivity growth anywhere in the telecommunications industry worldwide. So we believe that in calculating those costs and then taking account of those costs when the ACCC comes to do so, recognition of those social obligations, recognition of the costs of customer service guarantees, must be built into the pricing formula.

Let me conclude by just saying a few words on the specific issue of USO tendering. We believe that the provision of service in regional areas is clearly of great social importance. I know in an ideal world it might be funded differently and it might get a different weight from the weight that the political system places on it. We recognise that those are political constraints and that all we as economists can do is say if those are the constraints, then what is the most efficient way from society's point of view of delivering against those social objectives. We believe that USO tendering does have the potential to offer significant advantages relative to the administered system that we have had up to now. However, we have a number of very serious concerns about the way the current programs are being designed and implemented.

In our view USO tendering should operate as a reverse auction where the essence of that reverse auction is to allow the discovery, the revelation of the most cost-efficient means of providing whatever service levels are mandated by the political system. In effect, the schemes that we have are not schemes in which

subsidies are bid in but rather they're schemes where subsidies are being designed on the basis of what seems to us to be merely administrative cost modelling and where the result of the reliance on the administrative cost modelling is to undermine the cost revelation aspects that would otherwise characterise the process. Now, we recognise that tendering for provision of service in USO areas could be either on the model where the winning tenderer received exclusive access to a subsidy for a defined period of time or could involve some scheme of portable subsidies. We don't have problems of principle with the notion of portable subsidies and can indeed see some merits for it in particular applications.

The problem with portable subsidies, however, need to be recognised; that they include the costs of cherry picking, the high administrative costs of the scheme and the risk that economies of scale and scope may be undermined. We are particularly concerned about entering into a scheme of portable subsidies where the arrangements in place, the regulatory arrangements in place, send such inconsistent and profoundly flawed economic signals to the participants in the process, and the essence of that flaw is that the subsidy is based on ACA cost modelling which comes through perhaps reflecting its high level of disaggregation, relatively high levels of costs for service provision, whereas it will be open to the providers to supply the services using assets that are being priced on the basis of ACCC cost modelling where the ACCC cost modelling comes to much, much lower estimates of the economic costs of providing service.

In our view any such scheme merely sets up arbitrage opportunities and those arbitrage opportunities are very unlikely to guide either the discovery of efficient technologies or a proper process of selection amongst competing retail suppliers. In short, we strongly support the broad direction that the commission has taken. We believe that there are some areas which do require further consideration. I have stressed regulatory risk. I have stressed the role of pricing principles. We believe that closer attention needs to be paid to the USO. We very much look forward to providing further and better particulars, as they say in the courts, as this process proceeds, but we are very happy, together with my colleagues, to take any questions or address any comments. Thank you for your patience.

PROF WOODS: Thank you very much and thank you for that presentation. I take it that the copy of these slides will be incorporated in the submission and we can post those to our Web site as soon as practicable?

MR ERGAS: Yes.

PROF WOODS: Thank you for that. You have raised a number of issues. If I can pick one up at the start. You offer some support for the removal of price caps with some caveats as to the extent that removal is likely to go in the immediate future. You, at the same time, support the development of legislated pricing principles, give a general support for the direction we have taken but suggested they be extended, particularly in three areas of financial, capital maintenance, and compensation for regulatory risk and recognition of social obligations. If I can come back to those that we have actually put forward in the draft, can you give us some thoughts on the

relationship between the existence of the price caps as they currently are and the effective operation of the pricing principles as we propose them and whether that suggests to you some need to modify the proposed pricing principles. I think you can probably pick them up best from our recommendations at the front (indistinct) scanning for.

MR ERGAS: We believe that those pricing principles that you have set out are very sensible ones. The concern that we have had is not so much with the principles per se as really with the question of whether they do in fact provide sufficient guidance. The easiest way to test for that is to see whether there's anything that has been done so far that could not be done under the terms of these pricing principles. It's not entirely apparent to me that these pricing principles would correct even of themselves the major errors that we have seen to date.

PROF SNAPE: Including the first one, the first two ones.

MR ERGAS: Yes.

PROF SNAPE: It could be interpreted, and that's perhaps - - -

MR ERGAS: Could be interpreted.

PROF SNAPE: I think that's probably the rub as far as you're concerned.

MR ERGAS: Yes, that's exactly right. Our concern is that those principles lend themselves to quite-wide ranging interpretation and they might be interpreted in ways that we believe would be inappropriate. We also have a specific concern which is perhaps rather a matter of detail with the way the principles are, as it were, set out, the way they come together. This, it seems to me, is particularly acute in respect of the first of your four principles. The reason for that is that I think you have quite rightly phrased this as a principle that says "across a facility's regulated services as a whole". However, the problem is that there is nothing in that that would ensure that each service covers even its long run incremental costs. In other words, that principle is consistent with reaching the floor test that would be widely accepted in respect of access pricing and that floor test is that no individual service ought to be supplied at less than its long run incremental cost if it's intended for it to continue to be supplied in the long term.

PROF SNAPE: Actually I thought it was covered by the second point. The second point refers not to the general revenue but the prices.

MR ERGAS: I interpreted the second point to be in essence that the mark-ups not be such as to detract from efficient resource use.

PROF SNAPE: Okay.

MR ERGAS: I agree with that. I agree that there's a question of the allocation of joint and common costs and that that principle rightly says that the mark-up should

be efficient mark-ups, so I accept that principle. It seems to me that that then ties nicely in with your third principle which is that again in recovery of joint and common costs, that where it's feasible, some form of multi-part prices should be - - -

PROF SNAPE: I think we said where it was efficient actually, rather than feasible.

MR ERGAS: Yes, when it aids efficiency.

PROF WOODS: Can I just take your point though. I understood you to say that for the pricing of services, that they should separately and collectively have a floor that recovers the efficient long run costs, but if you then look at our third point where, allowing the option of multi-part tariffs and price discrimination so that you can in fact price according to some Ramsay principles there, is there some conflict in what you're trying to achieve and what that third point is trying to achieve?

MR ERGAS: No, I believe not, in the sense that all I really had in mind there in respect of my concern with your first point above and beyond the question of trying to get more clarity into it and taking out some of the scope for perhaps improper interpretation of that principle was that the generally accepted approach would be, I believe, that each service ought to be priced to recover its incremental costs so no user or group of users should pay less than their incremental costs. Where use is long run in character or where there's a long run obligation to supply, then the relevant cost of use versus non-use is a long run cost, and so the floor is defined in terms of wherever there is either a long run nature to the assets or an obligation to supply, the floor is defined in terms of the long run incremental costs of each service, and then the ceiling test would say that for the collection of services that collection of services should be such as to recover the costs involved in its long run supply. So it's a combination - - -

PROF SNAPE: Perhaps you can elaborate that in a supplementary submission.

MR ERGAS: Perhaps the simplest example of that would be the New South Wales rail access regime which sets it out in quite those terms.

PROF SNAPE: I think that we didn't suggest the ceiling in quite the way that you suggested there.

MR ERGAS: No, I agree with that.

PROF SNAPE: Indeed, we were a bit slacker on the ceiling than you were there because what we had in mind in the design of these was that regulations and regulators are not perfect and that we could in fact envisage that there might be a band in which prices, so long as they're above a certain level and not above another level, would in fact not have serious implications for efficiency, and that in fact within that band there may be more distributional effects than efficiency effects.

MR ERGAS: I see.

PROF SNAPE: We were trying to say if there is such a band, then we were focusing on the efficiency and questions, and not so concerned as to where it would come within that band, so that there may in fact be - we are trying to set a floor that it go above a certain level, a ceiling, which in fact was where, if that ceiling were exceeded, there would be adverse efficiency effects. That was the thrust of at least part of those recommendations, in which case it was in fact not as precise about the ceiling, or didn't set the ceiling, in the way at which I think that you just articulated.

MR ERGAS: Yes. I take that point and I certainly see the merits in the approach that you have set out. In the view of it that we have put, I would hope that the same result would be achieved but perhaps by a slightly different means in the sense that in our approach it does seem to us that the regulator to some extent does set a ceiling. We believe that that ceiling should reflect the costs associated with the provision of a service taking account of the risk of error through the regulatory risk premium. The reason that we have broadly adopted that approach, or recommended that approach, was that it seemed to us that that actually forced some consideration in an explicit way of that risk of error. So we certainly do not disagree with the objective that underpins your formulation, but we were perhaps getting at that same objective by a slightly different road.

PROF SNAPE: Yes. I suspect that's correct.

PROF WOODS: To that extent, and we are trying to identify the band, you have posed three further additions to the pricing principles. My concern there is to what extent do they affect the limits of the band or are you trying to be more precise within that band through the addition of those three principles, and for the sake of the trade-off between clarity and simplicity there is a concern that if the matrix of principles becomes too extensive where we're actually spending a lot of administrative time and regulatory complexity to pinpoint within that band. So if you could briefly address the extent to which you see the three additional matters that you would like to see raised as being either to give greater definition to the band or to be more specific in targeting a price within that band.

MR ERGAS: I accept that there is always an issue about the appropriate level of specificity of the rules that one imposes and I also agree with you that ultimately - as all those of us who have ever grappled with costs or attempting to measure costs in the real world know - all of these processes were attempting to define costs and measure costs, are processes that result in ranges and bands and that's to my mind probably an unalterable fact of life. So I certainly accept that. We believe that these principles will assist a regulator in determining the appropriate band in the sense that particularly the first but also the second and third will act as constraints, will act in my view as material constraints on the overall revenue that the regulator will determine for the regulated services.

We don't believe that these principles are unnecessarily complex in their interpretation or implementation. They are in our view very similar to principles that have been used in regulatory legislation elsewhere in the world and even in some of

the legislation at state and territory level that bears on particular regulated or utility services, though we have chosen perhaps a more technical way of expressing certainly the first of those principles than you would commonly find. We believe that the concept of financial capital maintenance is very well understood by economists and is one that is not unnecessarily difficult to give concrete meaning to. So I would hope that those principles would be seen as adding to the broad approach that you have suggested rather than necessarily or in any way really displacing the principles that you have set out which strike us as good ones, and that in practice they would help both in determining the band and then when it came to individual services in setting the floors and ceilings, that might be attached to those individual service elements.

PROF WOODS: Do you want to comment on financial capital maintenance?

PROF SNAPE: I'm trying to grasp this and think through it. Just before I do that, I just perhaps refer back to your opening remarks about vision, and I think that probably in asking for some vision we were pretty much in the same area as you are indicating. We were, of course, not asking for that which would lead to central planning. We were asking for the sights to be raised somewhat from what seemed to be the legal interstices that so often occur in a regulated environment and in which, of course, the lawyers earn their living, to something rather above that and in particular to pinpointing of those regulations which would inhibit the development of scenarios which could be seen with various types of vision, and in fact that was the context in which we were trying to formulate it and it was the sense, I guess, in broadcasting that was there saying, "These regulations are in fact inhibiting the development of such-and-such," and that was the context in which we were seeking it.

But the financial capital maintenance in regulated assets were prudent at the time they were made. Now, there are many forms of - there are regulated assets and of course the effect on the return that's going to be made on those regulated assets can come from various forms of regulatory risk. They can come from new regulations, which in fact would tend to depress the return; they can come from regulations whether new or removed, which, in other activities or in competing areas, would affect it also, and so a new regulation that prohibited - I'm being hypothetical, of course - that prohibited further development of mobile phones would have a significant effect upon the anticipated rate of return on the copper wire as against no regulation. So in assessing that, how far does assessing this rate of return and where one would set the price in order to get that rate of return that would be expected from a prudent investment, how far does one cast the net in looking at the changes of regulations which has occurred?

MR ERGAS: In some respects the prudency tests, as we've used it and as it's been utilised, for example in the United States, is really a matter of onus of where in the regulatory decision-making process you set that onus and how you identify the threshold associated with the onus, and you can see that if you contrast the prudency test with optimisation as it would be carried under some concept of physical capital maintenance such as, say, optimised deprival value approach to asset valuation. The

crucial difference is that in a physical capital maintenance optimisation approach, the evidence that is required to change the value of the asset and hence change the stream of returns to the owner, is evidence that merely shows that the current market price of the asset or of its modern equivalent replacement differs from the value of the asset as corresponds to the amount consistent with the financial capital maintenance, which will broadly be the undepreciated value of that asset.

So, in a way, all the regulator needs to do to write down an asset is identify a gap between the undepreciated amount and the amount that corresponds to contemporaneous replacement, and at that point the asset write-down can occur, and it's really as a result of that approach that we have seen - not solely in telecommunications but in other regulated industries in Australia - such substantial asset write-downs, which are very, very large by comparison with those that have been effected, for example, in the UK or indeed, I would say, even more strikingly relative to the United States.

Now, with the prudency test, on the other hand, the issue is not whether, as matters turned out, there was this divergence but rather whether a reasonable decision-maker at the time of the investment decision would not have sensibly taken that investment decision. So the onus in the administration of prudency tests has typically been on the regulator to show that decisions have been imprudent, and the case that perhaps most starkly stands out - and this really brings me to your question - is that of the treatment of nuclear power generation assets in the Unites States where a succession of regulators have in recent years, or really in the course from Three Mile Island on, determined that the investments made in nuclear generation, would not have made. So the way they've interpreted that test is that the investment reflects the moral hazard associated with whatever insurance the regulatory scheme until then provided.

Now, you could look at those instances - and there is, incidentally, a fair bit of evidence that the stranding of those assets increased the cost of capital to electricity generation in the United Sates - you could look at those decisions and say that really all that happened was that when the investment decisions were taken largely in the 1960s, the regulatory regime in place was one that was aimed at positively encouraging investment in the generating plant, the nuclear generating plant in particular, and that the reason the investments became imprudent was because in the 70s and 80s additional safety regulations were imposed which made nuclear ultimately very costly relative to alternatives to nuclear power. So that what they were really penalising the companies for was not for commercial decision-making but the failure to anticipate the change in regulatory arrangements that would ultimately occur.

Now, in our view, the correct approach to the risk of regulatory change is not to insure firms against it by compensating them at the time of the regulatory change but rather to build that risk into the allowed cost of capital of the firm, ie, to deal with it in exactly the same way that will deal with other policy changes in the economy. So there's a risk that firms bear that the tax system will change and that what were reasonable investments at the current tax arrangements will no longer be so once the tax arrangements are altered. That isn't an argument for full compensation against changes in taxation. It's really an argument that says that reasonable investors will take account of that risk when they estimate the net present value of that investment and they'll take account of it, be it in the cash flows or in the WAC but somewhere they will take account of that risk, and in exactly the same way we would say that the appropriate response to regulatory change is to, rather than attempting compensation on the day, to ensure that you have provided for it in your calculation of the allowed revenue.

The reason for that, in my view, is essentially this and it's very similar - and I'm sure this will be debate that you will know much better than I - to the classic debate in tax policy about whether you provide full compensation for tax changes or not. The reasoning seems to me to be the same; that there's two reasons why you don't provide for compensation for policy changes on an ex post basis but rather recognise its cost as part of the opportunity cost of decision-making. Those reasons are, first, that any scheme that attempted to calculate the costs of the compensation required and then to extract it would be administratively extremely complicated because it would require not merely compensating the losers but also taxing the winners if it were to have zero net present value going forward.

Then the second point is that, to some extent, you want reasonably-minded, well-informed investors to attempt to foresee regulatory changes going forward. Where you have poor regulations or where there's some costs associated with responding to changes in regulation, society gains if those who adequately predict the changes - who best predict the changes - do better from the changes than others. So just as society gains in that sort of classic 1950s tax literature, society gains when able-minded investors foresee tax changes and ensure that they don't incur some costs that will be invalidated by those tax changes. So society gains when the most able-minded investors foresee regulatory changes and don't incur some cost that will be invalidated by those regulatory changes.

PROF SNAPE: Okay, you've helped to clarify my mind in question but the point that I was getting at is that just as you said that the tax changes could benefit some but hurt others, it's not always that more is going to be taken away. So regulatory change can be adverse or favourable. Now, if in fact one is looking at that and one is thinking of a whole raft of possible regulations as well, then one is thinking of a regulatory risk which may in fact not be asymmetric but in fact be symmetric; that in fact there is a risk from gains from regulation; there is a risk from loss from regulation. If it is a symmetric risk, if one is thinking in those terms that because of the whole raft of regulations that might be in fact implemented and changed in this industry, is one necessarily saying that in fact there should be a premium for that risk or not?

MR ERGAS: The issue you raise is in my mind equivalent to the question of whether the risk associated with regulation can be diversified away, either diversified through a pool of regulations, as in your example, or diversified by holding assets that are exposed to differing regulations. If the risk of regulation could be diversified

away, then that diversified risk would not require compensation through the cost of capital, at least to the extent to which you did have at the margin investors who were capable of holding fully-diversified portfolios.

The issue to my mind in that respect is twofold. The first is to properly understand the impact that regulation has and how it relates to the basic determinants of a firm's allowed revenue stream. There it's important to distinguish between impacts on cash flows and impacts on the required rate of return, the compensation of risk bearing. In my view these two elements, which are analytically distinct, are very often confused both in practice and in the analysis. The simplest way to think about that is to look at a regulation that constrains the upside without limiting the downside. Any regulation that constrains the upside without similarly or symmetrically affecting the downside necessarily has an impact on the expectation of the firm's cash flows, ie, what it affects is the expected value of the cash claims associated with ownership of that firm. It may do so without having any impact on the firm's cost of capital, but the impact on the cash flow is still an impact that needs to be compensated for.

If you look at the cost of capital in the sense of the allowed compensation for risk, what the theory is telling you is that what markets do is they price equal dollar claims. So what, for example, the capital asset pricing model tries to do, or the arbitrage pricing theory model, is to price the value of a claim on \$1 where that claim can be called upon in different states of the world. So the underlying premise is that you have a \$1 claim and you ask yourself: if that is a claim, say to \$1 when the market is up or \$1 when the market is down, \$1 when the economy is doing well or \$1 when the economy is doing poorly, how much will risk-averse investors pay to hold that claim - those claims then coming in the form of bundles of claims?

So the underlying premise is that where an action, be it a managerial action or a regulatory action, has affected the cash flow, that is recognised through the cash flow and then all that is priced in the capital markets is the claim on the resulting cash. So again coming to the simple point of the upside and downside, when the upside is curtailed, an investment that previously, say, had an equivalent cash claim of \$1 will now have a cash claim of 75 cents. For that investment to proceed if the cost of that investment is \$1, investors must at a minimum be assured of \$1, so there's a requirement that somewhere that 25 cents is going to be made up. Then they have to bear the risk associated with some of the 75 cents and the 25 cents, ie, the risk associated with that \$1. That risk is what is in fact being priced in the cap M.

So the long and short of it is that any regulatory action that affects the cash flow needs to be recognised. That needs to be recognised in the change in the expected value of the cash flows. Additionally, regulatory action may affect the volatility of those cash flows and in particular their co-variance with the return on a diversified portfolio. It's that co-variance which is then priced into the cost of capital. Now, assume that you had regulatory action, the expected value of which had been appropriately priced into the cash flow: could it nonetheless affect the diversified position of an investor? The response is that that will depend on the extent to which an investment of that kind could in fact diversify that particular set of income claims.

Assume that you had the most simple of all possible worlds where when people did terribly nasty things to Mitchell Landragin, who's over there, from Telstra, the direct beneficiary was Derek Francis from Optus. So though you and I might think that Mitchell Landragin is a very nice fellow and it's cruel to do mean things to him, as hard-nosed investors we could diversify against the irrationality of the ACCC towards Mitchell Landragin by holding claims on Derek Francis. But the reality of it is that so long as any of those actions are not fully captured by Derek but rightly or wrongly he passes some benefit on to consumers, which he's reluctant to do but may be forced to do, then we can no longer diversify that risk because there's no claim that you can write against consumers or no direct claim. So, so long as you have any element of passing on of regulatory risk, then it follows that even the most perfectly diversified investor will not be able to fully protect or insure against that risk and hence it is likely that that risk will be captured in part also in the cost of capital.

Indeed, it seems to me that the reason you often observe for some regulated assets such as water, forms of ownership which vests ownership in consumers is because, even though those are not terribly efficient ownership patterns in terms of monitoring, they're in the presence of extremely long-lived assets with very high sunk costs and major exposure to regulatory risk. They are an effective way of hedging regulatory risk, because they place the risk of expropriation against those who would benefit from it in the first instance, ie, the consumers of those services. I apologise for having been terribly long-winded, but it's an unbelievably complicated question, as you know better than I.

PROF SNAPE: I don't accept the last point, but thank you very much.

PROF WOODS: Can I briefly focus on a claim by one of the participants that the ACCC overestimates the outcomes of TSLRIC by use of a scorched node approach rather than a scorched earth approach. Do you have a view on that perspective?

MR ERGAS: Let me reply to that in two parts. The first part is that it's all too rare, or it had been all too rare until the recent debate, to hear people actively argue in favour of "scorching" earths or nodes. So I have a slight element of hesitation there but let me pass that question over to someone who's an expert in that, and I might comment on that, which is my colleague Alexis Harden, and she'll reply to that question.

MS HARDEN: The reason that a "scorched node" assumption is used rather than a "scorched earth" is basically because it's so - - -

PROF SNAPE: You could use the other microphone as well, which is the amplification. We've got two systems going. Thank you.

MS HARDEN: Okay. The reason why I think that they use the scorched node approach - and not just in Australia but in other countries as well - instead of the scorched earth approach, is mainly because it's so difficult to implement the scorched

earth approach and it would be very difficult to completely reoptimise the network or even to have any one view on what the complete reoptimisation of the network might be, plus, I think, one of NERA's reasons for using "scorched node" instead of "scorched earth" was because they viewed it might be unreasonable to anticipate that Telstra could immediately change to a fully scorched earth network, given that it's built up its network over time based on the given locations of its local switches.

MR ERGAS: Can I add to that in one respect, which is this, that it seems to me that in the Australian context the difference between "scorched earth" and "scorched node" is probably much smaller than it is elsewhere and the main reason for that is that as part of the process of modernisation of the Telstra switching network during the late 1980s through to the mid 1990s - the so-called "future mode of operation" or FMO program - in fact the location of the nodal points was reoptimised as the program proceeded, and so what you're looking at is not a situation, say, like that in the United States where there hadn't been a systematic review of the location of major switching nodes, rather such a review of the nodal locations had in fact very recently been carried and what the TSLRIC models do - both the NERA model and the modelling that has been done by Telstra - is to pursue full implementation of that reoptimised switching fabric.

So in fact there is more optimisation in the choice of those nodal points than is indeed the case in the current physical network at this stage. So in that sense I think the gap would probably be relatively small. The costs of a full reoptimisation would be very high and even with minimum spanning-tree algorithms and other approaches that have recently been used to reoptimise nodal locations, the results of all the work I've seen suggests that there's still a considerable range of estimates that are generated when you use those algorithms, and hence what that would do is not only add compliance costs in the sense of costs of actually carrying out the calculations but also add a further significant element of uncertainty to the process.

Can I make a final point on that, which comes to the distinction between scorched earth and scorched node and it's this: that when you reoptimise, what you're doing is, in effect, assuming close-to-perfect foresight. So when you reoptimise location, for example, of cable runs in a scorched earth approach, what you're assuming is that the carrier in question knows where all the customers are and then builds the physical assets around that pattern. Now, because in the subsequent period you're going to do that again and because clearly you don't have perfect foresight and you have a fair range of moves, disconnects, a lot of customer return, particularly in a geography like Australia. You have phenomena that are quite significant in terms of costs that are much less significant in the UK or Germany or the United States which is that if you're in the UK and a customer disconnects, it's very likely that another customer will ultimately reconnect at that premise. In Australia, for a fair part of the costs of cabling, you can have customers who disconnect and no subsequent customer reconnects; for example, take regional towns and even more so when you go to some sub-areas below the regional centre level, you actually get a very high proportion of assets that are stranded and completely new assets are needed in new locations.

So because you have that, then the reserve occupancy or the plant occupancy margin that you need to build in if you're using scorched earth is very high. So if you properly implement scorched earth, what you do is, yes, you take some costs out to the extent to which ex post optimisation allows you to have shorter cable runs than you would otherwise have, but you build significant new costs in because you in fact have to build in the redundancy to cope with the lack of perfect foresight in future periods. If you don't build in that redundancy, then you simply have to increase the allowed cost of capital. So at the end of the day, there is to my mind no evidence that properly implemented scorched earth will lead to any lower costs than the type of scorched node approaches that have been used.

PROF WOODS: Thank you very much. An underlying theme of your presentation to us has been to construct an environment that promotes investment in infrastructure. We've had evidence from participants to this hearing, two in particular who own an extensive roll-out of HFC cable, and yet neither of them are digitised at this point. Do you see that as a regulatory failing or a market failing or just a natural evolution in the redesign and reformatting of infrastructure and investment?

MR ERGAS: I'm not, to be quite frank, at all privy to the internal decision-making processes that have led to the non-digitisation of those services and hence my comments on that are to some extent in the nature of speculation. But what I would say is this: first, I think it was quite striking that the market responded very positively to the announcement in this room the other day that given the regulatory risks, digitisation of the Telstra HFC was not on the immediate agenda, and that suggests that the markets themselves viewed some element of risk - whether it's market risk or regulatory risk bearing on those assets is difficult to say.

I think it is the case that the decisions such as the HFC digitisation seem to me to bear out many of the criticisms that are legitimately made in your draft report of the current arrangements. First, it's by no means apparent that the HFC ought to have been declared in the first place and it's very difficult to see what the market failure that was being corrected by that declaration really was. So if there was a case - and I think there were several others - but a case that highlights the types of costs that your report points to, the HFC would be that case.

The second is it also seems to me that the HFC digitisation is again a very nice illustration of the argument that is put in your report about truncation of the upside without any corresponding insurance against the downside. The reality of it is that if the digitisation proceeds, if it's successful, then there will be very strong pressures for third party access to it and at least as the pricing regime is currently interpreted, there is no confidence that can be had that those pricing arrangements will reflect the ex ante risks involved in the digitisation decision. So under those conditions, what the parties are left with, it seems to me, is a situation where the losses are privatised and the gains are socialised, almost the opposite of what we have tended to do in many other industries and instances where the pressure of the political system has been to allow private profits to be retained and private losses to be spread. So under those circumstances, I would not be at all surprised if that regulatory risk had in fact

borne fairly significantly on the decisions that have been taken and will need to be taken in the near future.

PROF WOODS: Thank you very much. That concludes the questions we wish to ask. Thank you very much for making the time available. We look forward to further elaboration of matters which you've identified; if we could ask that they be presented to the commission well before the end of June, that would be helpful in us arriving at a timely conclusion to our report. Are there any concluding comments you wish to make?

MR ERGAS: Merely to thank you and all those who attended for their patience.

PROF WOODS: Thank you very much.

PROF WOODS: The commission has been asked to accept supplementary information from one of the previous participants, being Cable and Wireless Optus. We agree to that request and call for them to come forward. Thank you, Cable and Wireless Optus. If you could please identify yourself and your position.

MR FRANCIS: Thanks. Derek Francis, Cable and Wireless Optus. First of all, I wish to thank Commissioner Woods for giving Cable and Wireless the extra opportunity to focus on certain issues associated with the ACCC's implementation of TSLRIC and retail price controls, a topic that the previous speakers from NECG focused on as well.

What I'd like to do, if possible, is give a slightly different perspective on that in terms of firstly proposing an economic paradox. What I have here is the ACCC's observed TSLRIC prices for line rental in the four geographic areas. So you have got 130 in CBD, 357 in metro, 280 in provincial and 590 in rural. Now, what that suggests is that the metro area is the second highest cost area in terms of the ACCC's NERA modelling results. Secondly, what I've done is I've mapped Telstra's retail prices against these NERA model costs and what we find is that Telstra's business line rental at the moment is \$300 and the NERA model estimates the cost of that at around 150 to 280 per annum. Then what I've done is I've measured residential line rental for Telstra which is 190 to 210 dollars, depending on which option you take, versus the newer model price for the metro area entry which is coming out around 347. I think NECG previously put up a slide which had about the same relativities but I think the had the metro line rental entry price at around 390.

So obviously from this as economists what we would sort of expect to observe, is that we would expect to observe, "Well, there's a bit of cream skimming and margin in business areas and residents are not going to get any entry at all because obviously price seems to be held below cost in residential and it seems to be held above cost in business." What we actually have, and this is the paradox of this, is that observed entry by new entrants has actually been more vociferous and larger in the second highest cost area in the newer model, in the metropolitan area, where Cable and Wireless itself has 500,000 lines, Telstra approximately has 7 million. If I had mapped it directly against it then it would have only been about 5 million. Competitor market share in this second highest cost area is 7 per cent whereas in the business area where you would expect to have a lot of entry because you have got price above cost, you actually observe very little entry, you have only got 100,000 lines supplied by competitors, and a competitor market share of only 3.6 per cent.

I pose this as a paradox because it doesn't make any sense when we look at economic theory which would suggest, well, we get a lot of entry in the CBD areas and not much entry in metro areas, and so what do we conclude - well, we can't argue with the actual data because that's what the data says so there has to be something wrong with the economic theories I guess. What does the actual data suggest? I guess it basically suggests that the ACCC over-estimated the NERA model costs in metropolitan areas and the next lot I will have is I will have why they did that because obviously we're a new entrant and everything and we don't roll out a huge amount of services in residential areas if you have got the price of service being significantly held below cost, but it also suggests something a bit more profound. That is that in the actual area where there is the biggest margin to be obtained, that there are some material barriers to entry still going on that have been erected, because it doesn't make any sense that there is not entry coming on in the CBD business market, so there must be some sort of artificial barriers to entry going on.

I guess a thesis that we have put is that a lot of these barriers to entry in the high cost areas are Telstra's non-provision of number portability of the business market, where obviously the incentive is for them not to provide number portability very high, and the second thing is government erected barriers to entry with building access. I will just go through a little bit more of the data. This is where I think there is probably a little bit of a disagreement with myself and the previous speakers in terms of the relative effects of access pricing regulation. This is the Optus HFC roll-out in metro. We have seen this slide before on Monday but essentially what the ACCC did over this period is they set - price of access was about 3 cents in 1998 and it sequentially went down to about 1.5 cents by March 2000. What we can see is that actually corresponds with the increase in Cable and Wireless Optus's roll-out, so I think it's exceptionally hard to sustain the story; that somehow the ACCC have set access prices too low and that is causing a lack of investment in networks because we actually observed the opposite phenomenon happening; that as the ACCC has set the access price down, the Optus HFC cable network has revved up in terms of actual roll-out and we can see that that acceleration has occurred.

PROF SNAPE: Sorry, can I just clarify. Are you talking about roll-out or are you talking about connection to what is effectively a sunk investment?

MR FRANCIS: To be honest, the actual major cost of the roll-out is the final drops into people's homes, the direct connection, so while the actual roll-out on the poles is sunk, a major cost is the hook-up. Okay. So what I want to do is try and explain some of these results in light of something where we believe the ACCC has gone wrong and then I will end off with a couple of conclusions. This has been a submission to you. This is on p.1. Basically what we believe was that the ACCC was very conservative in estimating the TSLRIC and as we have heard use of scorch node rather than the economically correct greenfield approach. It's very important to understand that the cost of providing access is essentially determined by the cost of new entry on the scale of the incumbent, so it's not determined by the cost to Telstra of rolling out its historical network as it was 50 years ago, costed at today's prices.

I'm not sure if the previous speaker was essentially arguing that financial capital maintenance costs Telstra's network as it looks today, which is it's historical Melbourne, and then costed at today's prices, but that will give you the economically incorrect price. The actual economically correct price is basically determined by what's best in use technology today. I can tell you what best in use technology is today. It's what we're doing. We're rolling our aerial network strung on poles. You get very cheap lease costs and the costs of actually rolling out the distribution network are very low. Transact is doing exactly the same thing. Neighbourhood Cable is doing exactly the same thing.

Essentially what the ACCC did was, rather than doing forward looking best in use practice, what they did was they said, "Telstra has sunk this historical network with trenches. Let's cost that and cost it at today's prices," and that produced a very high price result. That's why I observed this paradox where we have got entry occurring in the ACCC's second highest cost area but in actual fact with the amalgamation of retail price controls it's suggested that those margins are actually negative there where we actually observe entry there. So I have got a few other points there.

PROF SNAPE: You're not swinging from poles in CBDs?

MR FRANCIS: No. In CBDs the efficient method is to share with the other utilities in trenches, so in the metro area you're just swinging from poles, but in the CBDs and business areas then you would go underground in trenches shared with other utilities, the gas and the electricity utility. so this is what we're doing in metropolitan areas and this is why we're actually entering, even though the NERA model says the cost is 350 and the retail price is down at 190 which doesn't seem to make any economic sense at all (inaudible) observe all this entry.

We've got a few other things in here on utilisation of copper pairs, 1.3 versus 1.1. Distribution network sharing wasn't forward-looking, so that's the sharing with other utilities which we employ, but essentially we lease the distribution network off the electricity utility. That's what you'd see happening. ACCC didn't subtract the contribution from other services supplied over the PSTN. Essentially we make money from telephony, but also we supply a bundled set of services and they all make contributions to your fixed network costs, so to get economically correct cost recovery you have to subtract the contribution from those services, so things such as ISDN, fax-stream, even unbundled local loop, should be subtracted so that you get economically correct cost recovery.

There are a couple of other technical points that I won't bore you with, but the gamma didn't properly reflect changes from the Ralph reforms and a lot of the cost of the operation and maintenance equipment was a bit ridiculously high. As an example, the cable that runs from Sydney to Melbourne - I think the ACCC assumes that there were 50 person hours annually just for the continued maintenance of that, and we have our own cable there and we only take 16 annual person hours for that. So I'd suggest basically that they overestimated that by three times too much.

So where is all of this story basically heading? It heads back to our basic theme that access pricing has been irrelevant to investment incentives. You can argue as much as you want about access pricing, but it hasn't affected our investment incentives. We're the biggest network provider out there besides Telstra and it all gets back to retail price control. We heard the previous speaker say that you've got to get access pricing right and retail pricing and there all these political problems and everything, but I guess in terms of economists we should know better - that there is no right access price if there are retail price controls that distort retail prices, because you're immediately in the world of second-best and because you're in the world of second-best you can't set economically correct access prices. You have to set third-best access prices and they're all a complete perversion - basically 50 per cent too high access deficit contributions for long distance, low call resale.

Telstra wants their wholesale price above their retail prices because of access deficits and all these other things, and any time I guess NECG goes in and makes a submission to the ACCC 75 per cent of it is saying, "In retail price controls you have to allow for that in your access price," and they spend 75 per cent of every submission talking about how access prices need to be perverted and distorted because of these retail price controls. Basically - I just repeat this again - you say Henry put up before the price in metro was \$400 per annum. He can't claim to me that holding every single residential line \$200 below cost per annum is not the key inhibitor of investment: it is the key inhibitor of investment.

I guess I have a slightly different view of where we're going. I don't see the world of tomorrow as this narrow-band world where grandma gets a basic telephone service supplied with subsidised access. What I see is a world where Telstra does put up their price to \$400 per annum. I'd love it. We'd roll out broad band everywhere and we'd supply people with high-speed Internet, we'd supply them pay TV, we'd supply them with fast Internet access, we'd supply them with telephony and we'd price it at about \$25 and we'd have all of the market and we could say goodbye to Telstra.

PROF WOODS: Thank you, Mr Francis.

MR FRANCIS: So that's the way I see things, and also that the retail price controls are inconsistent with Ramsey pricing, and that's the key story.

PROF WOODS: Can I just ask one final question? That's that you've used your customer shares, competitor market shares, based on lines supplied by competitors. What would be that table if you were looking at value of services rather than line shares?

MR FRANCIS: It's a little bit difficult with value of services, but with value of telephoning services and generally with telephony services, businesses are slightly more intensive users of telephony services than residential subscribers. But obviously what we do - this is the way of the future - is we give consumers a whole lot of new services. Basically we hook them up, we give them pay TV, we try and give them telephony and we try and give them the Internet and everything, and so the revenues go up, and the reason the revenues go up is because we supply them with a whole lot of innovative new services. So that's how we essentially make money, and that's the key to the future: getting rid of controls that distort investment incentives, so getting people to roll out infrastructure that improves welfare, and I guess the access pricing story has not for us been relevant to that.

PROF WOODS: Thank you very much. That concludes this morning's session.

(Luncheon adjournment)

PROF WOODS: We will resume our hearings and the next participant is the Consumer Telecommunications Network. Welcome. If you could please identify yourself and the position you hold.

MS CAMPBELL: Thank you. My name is Helen Campbell. I'm the executive officer of the Consumer Telecommunications Network.

PROF WOODS: Thank you very much and thank you for providing the submission, which we've had the opportunity to read and we will draw some questions from it. But do you have an opening statement you wish to make?

MS CAMPBELL: Thank you. First of all I'd like to thank the commission for giving us this opportunity and also to express our appreciation for the draft report. We've found it to be an extremely valuable document in terms of consumer perspectives on the state of telecommunications in Australia. There's a great deal of very valuable resource material in it that we greatly appreciate.

In relation to the draft recommendations that we've addressed in our submission, we wish to focus on just a couple of points that are of specific relevance to residential consumers, and we're not intending to attempt to comment on those matters about which we don't really have direct experience concerning the administration of the access regime.

The issues I'd like to specifically discuss today are set out in the submission. The question of the status of the principle of the long-term interests of end users, the policies relating to the price of access for household fixed lines - and it's a pity it's the same word because it's quite different from the question of access pricing as between carriers - and lastly the question of how we might develop policies and approaches which will promote choice and variety of services that are delivered on the local loop.

PROF WOODS: Thank you. As I say, we have had the opportunity of reading the submission. One of the early comments you make which is in relation to draft recommend 8.1 is that you draw the distinction between economic efficiency and overall social benefit. We have had further look at the words we drafted and submissions such as yours on this point. There may be some attraction to moving to a redefinition that talks about economic welfare. I'm wondering if that moves closer to your view about the importance of overall social benefit.

MS CAMPBELL: I believe that it would. Of course we would have to look at perhaps the question of whose economic welfare do we refer to. I appreciate the commission's approach in seeking consistency in terms of the principles that need to be applied by decision-makers and I think we would certainly agree with that; that we need to be consistent. What we're concerned about is to ensure that we don't lose the concept of the role of the end user. It has been suggested, perhaps light-heartedly, that one could combine the prudential management of HIH with the customer care quality of Woomera Detention Centre and still be economically

efficient.

I note in the draft report there is some discussion of how one might provide a benefit to the end user without otherwise achieving desirable overall economic goals but perhaps we would like to put it back the other way; that we want to ensure that both of those things are cared for. The particular concept itself, the long-term interest of end users, has been somewhat vexing. In particular, the question of whether the end user should be expected to endure some short-term pain because there will be some long-term gain, and whether that's appropriate or whether the immediate interests of end users is what's implied by that criteria.

I guess in specific, from the point of view of residential consumers, we can't really believe that it is necessary in our interests, or indeed necessary without our interests, that the price of access should increase. That has been an issue of some debate, and particularly in relation to recent decisions made by the ACCC in relation to the cost of residential access to the fixed line. We would certainly support an approach looking at overall economic welfare and benefit that was inclusive of the interests of end users and having that approach applied consistently.

PROF WOODS: Thank you. In its current formulation in the act, it talks not only about end users but long term, and I think you would agree that having the service in itself is a priority as well as the price it is paid, and if the price is too low it makes the service itself unviable. That's not in the long-term interests of the end users so there is a trade-off there. On a particular point of pricing we have had participants come before us to discuss the end retail price of fixed to mobile calls and some discussion about the extent to which those prices are underpinned by a high price being paid to terminate onto mobiles. Does your organisation have a view on why there seems to be some downward stickiness in prices in that area?

MS CAMPBELL: I think we would probably say we think we're paying those prices because we have to, that is, those prices are being charged because they can. We certainly supported the extension of fixed mobile termination as being one of the preselectable options. We particularly wanted to see that as a separate basket because those who are the experts at giving us the cheap calls to UK or whatever may not necessarily also be those that can offer us the best for the fixed mobile termination. So we are looking towards, and hoping for, and working with the industry, towards a more sophisticated multi-basket, multi-service deliverer preselection and override regime for the residential consumer.

We do believe that if we achieve that, that will certainly provide the opportunity for a wider range of competitors to offer that service to residential consumers and we do believe we would see a downward pressure on those termination prices if that happened.

PROF SNAPE: Yes. The preselection and override have to be treated separately in that category in that, don't they?

MS CAMPBELL: In some senses they do because the sorts of technologies we're

talking about differ but in other ways, for both preselection and override, we do believe there is a need for active regulatory intervention in that it's not necessarily in any one competitor's interests to help their customers shop around. We have found for example that if you choose Optus for your local access line to your house you are then not able to preselect other than either Optus or Telstra for your long distance and internationals so although the settings allow for it the industry, for whatever reason, has not chosen to provide it, and it's an area where - we would actually like to push that forward and say, "What it means is part of your licence condition is not only that it be possible but that it be done."

PROF SNAPE: But you could override in those circumstances, couldn't you?

MS CAMPBELL: Yes, you can use per call - - -

PROF SNAPE: That was my point.

MS CAMPBELL: Yes. Per call override is available but considerably less convenient, especially when you are organising your telephone service for your household. A per call system is not as convenient for a household as making those decisions as a setting for each call.

PROF SNAPE: No, I understand that, but nevertheless one does have the discretion on every call with the override.

MS CAMPBELL: Yes. That certainly goes part of the way but I think we would like to see it go further.

PROF SNAPE: That's why I was making the distinction between the two.

MS CAMPBELL: Yes.

PROF WOODS: You make reference to substantial competitive impediments to voluntary cooperation. Would you like to elaborate on some instances where you have seen that occurring, and how that might be resolved? How can we come to a less regulatory intrusive and more cooperative marketplace?

MS CAMPBELL: Yes, I could certainly provide examples. The question of how we both avoid regulatory intervention and get a more cooperative marketplace, I don't know that I've got the answer to that one. In terms of specific examples we look at situations like trying to get into carrier roaming, particularly with your short message service on your mobile phone, to be able to send those messages in between different providers' offerings and how we might achieve some consistency for example in terms of things like message length, agreed and deliverable times that the message is received; issues to do with the pricing and the timing of the billing for those short message services is an area where we do need industry-wide cooperation to provide an effective mechanism that goes right across the market for consumers.

We are dealing with those commercial entities who are looking towards the

advent of mobile number portability in September and showing signs of strategising quite intensely around how to retain their customers. That is obviously they wish to keep their customers and not make it easy for their customers to go elsewhere. So it becomes a situation where in many ways there's a commercial incentive for saying, "Come to me. Stay with me. Bring your friends and family with you because then inside my network I'll be able to offer you something that you can't get as between those that are in different networks." That's an area where we feel that those commercial incentives are operating in a different way from the way that we would want to achieve a market which really does go any to any and enables the consumer to shop around.

PROF WOODS: In that context you don't believe that the TAF has been effective. I take it from that that you're supportive of - may I say tentative recommendation that the TAF be abolished. Is that your position?

MS CAMPBELL: We're a bit neutral about whether it should be abolished or not. Not having been a participant it seems a bit perhaps impolite to look over the fence and comment. It appears that in its current form it's not been effective and maybe that's because it relies on a consensus decision-making model and has been unable to achieve a consensus. Maybe it's because there's no consumer representation in it and if we contrast it with forums where there are consumers that have produced more successful outputs, perhaps that would be a way forward. Maybe it needs to have a different kind of relationship with the regulator. I'm not sure that abolition is the only possible way forward but I don't see it being successful in its current form.

PROF WOODS: Thank you. You identify the existence of a publicly funded, fixed-line household connectivity and suggest that because of it you could abandon rental fees all together. Is a possible consequence of such an approach that you would therefore lock out any other networks who wish to build in opposition to the Telstra local loop? I'm thinking in provincial towns and the like where companies might want to set up and wire up their towns. But if there isn't a rental fee that they can gain from that connection it might destroy part of their business case.

MS CAMPBELL: I wish that we were standing at a door where there were many providers knocking, asking to come in in terms of building alternatives to Telstra for the local loop. I think the reality of our experience is that we have had an attempt, which has been overall disappointing, in Optus; that we don't see anything other than dreaming in most circumstances. There is no realistic prospect that there is going to be six or seven different carriers wanting to build a fixed line to my house in a small town in Australia.

PROF WOODS: That may well be inefficient anyway and we would not wish that outcome.

MS CAMPBELL: That's right. So we see it as being very much about getting access to the line that we've got and ensuring a consistent and sturdy quality to the line that we've got which then enables a great variety of services to grow. In relation to the pricing, what we want to say is we don't want to rule out, we wouldn't want to

say to a newcomer, "You're not allowed to charge your customer an up-front fee." But rather we think that instead of looking at the current pricing arrangements and say, "Will we have or will we stop doing it?" is to say, "Can we look at it a bit more creatively across the board. What are the other options? Can we be more flexible? Can we think about it in a different way?" If we think about it, for example, in terms of bit rate, you might find that the residential consumers have actually been subsidising the business users for many years and are likely to continue to do so. So if you want to talk about a deficit, it might in fact be the other way around if you used another criterion for looking at it.

So what I really wanted to say is we don't have one specific plan to put in front of you today, but we would like the opportunity to say, "We want the aim to be to maximise the discretionary spend that the householder has." We believe that that's the most effective way of developing and encouraging choice and diversity in the market. "The money is in my pocket. I can make a decision today. Yes, I'll make that overseas call for mother's day because there's a special I've just seen that really attracts me." I'm not in a situation where I'm saying, "I've already locked up that expenditure in a pre-paid fixed rate for my home and therefore I don't have that flexibility in my hand as I go along." We can look at that with an increasing diversity of services. We might get different kinds of - for example, virtual message bank kinds of services, all sorts of things that we want to see.

Your fixed line rentals are actually a bundle of a whole lot of different components. It has never been itemised. We would love to see it itemised and then we can look more seriously about how we might be more creative. But we know that in that there's a bundle of all sorts of different things. There's an amount of directory assistance. There's an amount for technical help. There's an amount of your access to 000. There's an amount which is your, if you like, booking rate for your phone number so it won't be given away to somebody else. There's all sorts of things that are in there somewhere. If we could break that open we might be able to say, "Here's the money back in your hand. You can now shop elsewhere for your directory or for your help desk or whatever." You could actually break that up and get a lot more diversity into it. If it wasn't locked up, if you like, in a sealed box with no label on it and that's your fixed line access rental.

So we just want to be able to be more creative. To the specific question, no, we wouldn't want a situation that discouraged a new competitor for coming on. We would certainly want to make it allowable that a competitor could come and say, "I've got something better. I need to build. I need you to put money up-front," and I think you would find that there would be people able to do that. If I could use the example of Internet service providers gradually coming to smaller towns where otherwise they had a long distance call to their local POP. There were new, young, small, innovative Internet service providers coming in. When they were capital starved they were saying, "Would you pay us in advance." In the town I live in, they came along and they said, "If you give us \$200 up-front for 200 hours we will build a POP in your town," and they did and people were prepared to pay that \$200 in advance for the 200 hours.

So I think that gives you an example of how you could extend that if you introduce some more flexibility into the pricing and as I said, the aim we want is to have more discretionary spend in the householder's pocket.

PROF SNAPE: I think that general approach is quite consistent with what we've got of in fact transparency of charges - and we could develop it more - but of transparency of charges and options that the consumer can take and, as you're saying, what might suit one person may not suit another person. I think there has been more flexibility introduced there and certainly more transparency than it used to be.

MS CAMPBELL: I guess our particular issue is with the increase of the fixed price which the ACCC recently allowed under the price caps regime and that's the issue that we want to address.

PROF SNAPE: I think that Telstra introduced a range of options that one could choose different charges.

MS CAMPBELL: More choices is good. Higher fixed prices is what we're objecting to.

PROF SNAPE: I understand. I mean, it is sometimes said that the elderly particularly find choice confusing.

MS CAMPBELL: There are choices that are confusing. I believe that's in the presentation. I don't believe that's a reason to restrict the choices. It's certainly the case it's been very difficult to get comparable information and on that point we do value the Productivity Commission's draft report. It's provided some very useful information. Also we have been asking the communications authority to consider putting information on its Web site that will assist with doing comparison shopping. There are a couple of other commercial providers that are going someway towards offering that kind of information. If you strictly want comparable information of course in some ways that dampens diversity too. So in some ways you can be too prescriptive, but you can demand that information be made understandable and that's certainly something we work a lot with the industry on.

PROF WOODS: Successfully?

MS CAMPBELL: We've developed a code of practice called the Prices, Terms and Conditions Code which we believe contains some very valuable directions in terms of, for example, the correct use of the word "free" and there's also been some welcome follow-up work by the ACCC concerning false and misleading advertising which we welcome. I also understand in the minister's announcement yesterday and the response to the Besley report there is some funding going to be made available for consumer awareness initiatives and that's also very much welcome.

PROF WOODS: I notice that in relation to Besley that you said that you'd seek the opportunity to comment further when the government's response to the Besley report is revealed, given that it was only outlined in today's media. I'll assume that you'd

like to defer that from today and come back to us if you wish to elaborate further matters in relation to Besley. But is there any immediate reaction that you'd like to put before the commission or would you prefer to wait?

MS CAMPBELL: It's very important that we have an approach which is inclusive of all Australians wherever they live and I think the initiatives in relation to improving access in regional Australia is very welcome. We're still awaiting the outcome of the tests on competitive tendering for the delivery of universal service and I think that also gives us some very valuable insights to how to go forward. From our own perspective we're possibly a bit disappointed with the initiative in relation to improving access speeds for the Internet from rural and regional households. It would be lovely to have the technical help desk provided but we'd really rather see the line upgraded.

PROF SNAPE: Back to the question of infrastructures, yes.

PROF WOODS: Do you have - - -

PROF SNAPE: Of course, in that one it may be the lines upgraded or it may be alternative technologies.

MS CAMPBELL: Yes. Our members, particularly those in remote areas, and I think I've spoke to you about this before too, have heard for many years that the satellites are coming but they're still spending 20 minutes downloading an email and there do appear to be a range of issues concerning the delivery of services via applications such as satellite. Sometimes it seems to be affected by certain sorts of weather conditions, sometimes it seems to be just too expensive and sometimes there's been great promises that have not come to be. So I think there's certainly developments which are welcome and we hope to continue to see them. I know there's Global Star and Iridium happening, that may well make a difference. But at the moment the message we're receiving is really that overall it remains a frustrating and clunky kind of system. I must admit a lot of city users have that experience too and it's one of the things we think really would help going forward is to develop a form of customer service guarantee that does apply to data usage of the lines. That can be technology neutral but would require, by whatever means, that at least you deliver what the customer is paying for.

PROF WOODS: Any other matters you wish to raise?

PROF SNAPE: No, I think that was a very helpful setting out of response and we understand that you've kept the responses within the areas in which the network has particular interests. It's been good.

MS CAMPBELL: Thank you.

PROF WOODS: We're very grateful for that. Thank you very much. We will have a short break before our next participant.

PROF WOODS: Thank you. I welcome our next participants to the inquiry, being Austar. Could you please identify yourselves by name and by position.

MR MEAGHER: Bruce Meagher, head of corporate affairs.

MS WILDE: Anne Wilde, general counsel.

MS McCORMACK: Emma McCormack, compliance and regulatory officer.

PROF WOODS: Thank you very much and welcome. Do you have an opening statement you may wish to make?

MR MEAGHER: Nothing particular, but I think just to reiterate the position in our submission which you should have at least a summary form of that now, and we'll be providing you with a fuller document very shortly which is essentially that in relation to the bulk of the commission's report we broadly support the view that the commission has expressed in that we do believe that at least in the medium term there is some need for continued industry-specific regulation. The one point of departure is that while we acknowledge that Part XIB has some shortcomings, we don't agree that at this stage it would necessarily be wise to delete it and that perhaps ways of making it work more effectively rather than removal would be the appropriate form.

I suppose the main point that Austar really is focussed on is the reference relating to the issue of pay TV programming rights and the effect on competition in regional markets. We don't believe that the current programming arrangements do have a deleterious effect. We believe that while there are obviously some, if not barriers, certainly some difficulties in establishing a pay TV business anywhere in Australia and the fact that we, having invested somewhere in the order of a billion dollars, have still not made a profit indicates that it's a big deal to get into this business. But those barriers are not in relation to the programming arrangements so much as cost of programming and in the regions, issues around reach, network deployment, infrastructure, personnel on the ground, marketing and all those other ordinary commercial issues that anyone trying to establish a business in regional Australia would face.

We think that it is premature to start making judgments about broadband or other sophisticated communications services in regional Australia when in fact there really isn't a significant market for broadband services anywhere in Australia. The issues of the development of a broadband market throughout the whole of the country are ones about investment by different players, including Telstra, or in particular Telstra, and the willingness to market those products in the capital cities or the regions. But that again is not something that relates to pay TV necessarily. There are number of people who are deploying networks and getting involved in communications services of various kinds throughout regional Australia with different business models, some based on telephony, some based on data, ourselves principally using pay TV. There are some others that have pay TV as part of their mix. So we certainly don't think pay TV is determinative of that and we also think that it would be premature to start

to make judgments about the broadband market in particular in the regions or for that matter in the cities at the moment.

PROF WOODS: Thank you very much. We have had a chance to read your submission, albeit only in the last hour.

MR MEAGHER: I apologise for that.

PROF WOODS: Did I take it from what you were saying that this is a summary of your submission and that in fact we'll receive a more detailed - - -

MR MEAGHER: That's correct.

MS WILDE: I think that's right. We thought that we'd just provide a summary today and then we'd sort of see if there were any particular points that came out of our discussion with you that we could expand on further.

PROF WOODS: Okay. Thank you very much. Part XIB; you say that you don't support its abolition and you talk about the deterrent nature of the provisions and their value as a bargaining tool. Can you elaborate for the commission what experience you've had with the use of XIB? I mean, clearly you've not been involved in one of the few that has actually led to its overuse but what about its deterrent value?

MS WILDE: I think in relation to XIB, you're right. Austar as an organisation hasn't had any direct experience itself. We are sort of currently, for want of a better way of putting it, putting our toe in the water in relation to conducting negotiations with Telstra to look at further expanding our activities in the telecommunications environment. It's been our experience, to be frank, that any form of assistance that we can get from the regulatory regime that assists us in that process is a good thing because it's quite apparent still even with the level of development that's occurred in the regulatory environment and the commercial environment with the increased competition that they're still very much a dominant player and they still very much use that in the course of the negotiations. It's our view that without the mechanisms that are in place through both Part XIB and XIC that there would be a substantial difference in the ability of players like Austar. Let's face it, we're not that small but there would be quite a substantial impact in our ability to negotiate favourable commercial terms with Telstra.

PROF SNAPE: Yet we have other participants who are also significantly smaller than Telstra who say they've never used or contemplated drawing upon XIB but have always struck "commercial" deals with Telstra. It being there, you're saying, is part of therefore your potential tools that you can draw on to improve your leverage. The question is if it was not there could you satisfactorily strike a commercial deal anyway.

MS WILDE: There is always a commercial deal to be done. What does or doesn't constitute satisfactory is dependent upon the circumstances in which the negotiations

are undertaken. Frankly, a commercial deal that might be deemed to be satisfactory in circumstances where you didn't have an XIB or an XIC to assist you I think would be far different from a commercial deal that might be deemed to be satisfactory from one that was negotiated in the different environment. I think from that perspective we would perceive that there is definitely some assistance given.

MR MEAGHER: Part XIB, as I've always seen it working properly, is not necessarily to do with whether you can or you can't come to an agreement because I think, as it says, that's always possible. A lot of it really working properly is about some of the conduct subsequent to an agreement. We - and I think it's the experience of a lot of people - have difficulties on a practical level often with Telstra, whether it's provisioning network to for example in our POP deployment; when we need to expand the capacity of our POPS there are delays. Now, some of that conduct is not deliberate or intentional or anti-competitive, it's just a large, complex organisation. But if there were instances where that conduct where there's some sort of systematic slowing-down for instance, failure to provide certain services, putting in place procedures which were unnecessarily onerous, then that I think is the sort of place where XIB was certainly designed to come in for a short, sharp deal-with-that. It's not something that actually relates necessarily to the broader question of access but those very practical day-to-day matters are critically important in service delivery and getting out to customers.

PROF WOODS: But it's those day-to-day ones that would also be hard to capture sufficiently to create an XIB circumstance, aren't they, if they are just the, you know, "Don't have the keys to the exchange today, sorry; come back next week," type of approach?

MR MEAGHER: That's right. That's true. I think there's probably an intermediate class of conduct where maybe you could demonstrate. I think from recommendation there were issues for example that Optus had where Telstra was insisting on paperbased processes where they could have had an electronic interface at no or little cost or difficulty but refused to provide it, which made it difficult to transfer customers in preselection processes and that sort of thing. Now, that is an area where I think you could use that sort of power and it's more than just an isolated, "This is what's happening at Wagga." It's a system-wide thing that could be remedied.

PROF WOODS: Do you have any evidence of Telstra wholesale treating Telstra's retail arms, whether it's country-wide or whatever, differently to Austar? Do you feel that you get equal attention in terms of delivery of Telstra wholesale services?

MS WILDE: I don't know that we've got - I know I don't have any knowledge to be able to comment on that. But I will make a general comment that if they are treated the same way then I'd imagine they'd be relatively disappointed at delays as well.

PROF SNAPE: On the first page you say that you've started investigating offering fixed-loan telephony products in rural and regional areas. This is what you've just been alluding to, is it?

MS WILDE: Exactly, yes.

PROF WOODS: While you were within pay TV mode your interface with Telstra was not sort of - was there difficulty once you started entering their patch, things have changed? Is that - - -

MS WILDE: In pay TV mode we actually didn't negotiate with Telstra at all except as just a normal business user with phone lines and our own sort of internal networks. We commenced a much higher level of interface with them as an ISP during the course of the last 12 months or so with the roll-out of our POP networks that Bruce mentioned before, and now we're again going up to another level. We have also put in place our CDMA resale agreements so we have got that level in there too and now we're going through the process of looking at further expanding the relationship into the fixed line or - -

PROF WOODS: So where you talk about going into mobile it is as resale?

MS WILDE: Yes.

PROF WOODS: You refer to the introduction of access holidays as a possible improvement and current arrangements. What sorts of investments would you see access holidays would apply to, and just how important are they in the great scheme of investment which may in fact more relate to maintenance, augmentation, upgrading and the like?

MR MEAGHER: I think that one of the issues under the Australian regime is that the access regime has been applied to both incumbent and new entrant pretty much equally which is, I think, reasonably unusual. So as a new entry who is building - we have a satellite platform which is digitised but which requires constant upgrades of set-top boxes which is an ongoing and very expensive business. Secondly, we have a microwave network which ultimately we think can be essentially become a local access network for telephony and data but that will require also a substantial amount of investment.

Now, I think the traditional investment principles where the amount and money and effort that we would put in to actually create that network if that were opened under the current sort of TSLRIC or other sort of model at the moment, might not justify the investment. Now, we haven't done all the maths and analysis at what level - and I'm not saying that we also wouldn't wish to be a wholesaler. It's entirely like that we would wish to be a wholesaler but certainly a mandated regime coming into an area where, you know, again regional Australia where the economics are marginal often anyway, it would be a significant disincentive to upgrade to say telephony because there's a fair level of risk in doing that, and technology uncertainty and all those other things at the moment.

PROF SNAPE: Where are you with your two-way broadband satellite that you earlier on said that you were looking at?

MS WILDE: I don't think we have ever looked at the two-way broadband satellite product. We're looking more at a two-way broadband product in the MMDS frequencies so the wireless network. We're still at a trial stage in relation to that technology but we are actually conducting a physical trial at the moment of the product.

PROF SNAPE: So it's rural rather than remote.

MR MEAGHER: The intention is that I think - to date we have 24 of our POPs broadband enabled and they're offering a high speed down PSTN return. In Newcastle we're conducting a trial at the moment with this two-way product which will deploy commercially towards the end of this year or early next year will be on current thinking. Don't hold me to that.

MS WILDE: No guarantees about commercial deployment though.

MR MEAGHER: But that would be the rough sort of time frame, within the 12 months, we hope, assuming trials go well et cetera. That network would ultimately serve the larger population centres, however many of them, you know 30, 40 of them maybe, and then where we can't reach either because of remoteness or because of issues of line of site if that still is a problem we would use a satellite which, on the current economics, would have to be asymmetric. It's very expensive to do two - - -

PROF SNAPE: They are doing it in some parts of the States now, I think, don't they?

MR MEAGHER: It's certainly possible to do it. It's technically feasible to do it, it's just a question of available transponder capacity, cost, all of that sort of thing, and possibly with new satellites it may become feasible in time; today, we don't see it.

PROF WOODS: You have a sentence that will generate several questions:

Austar does not hold exclusive rights to programming that restrict relevant others from being able to broadcast.

One question is, I had understood you had exclusive satellite delivery rights.

MS WILDE: We do, and this is phrased in this way because this is the sort of public component of what's going out here and obviously the content of our programming agreements is to a large extent confidential and we have got confidentiality provisions in those contracts.

PROF WOODS: I thought it was a tightly-packed sentence.

MS WILDE: We have I think 36 channels at the moment. Some of those agreements do contain provisions that confer various forms of "exclusive rights" and I think to take up your point, there's only a small number of those channels whereby

we are given any form of "exclusivity" and as you said, they do relate back to the forms of the technology or the medium over which those services can be delivered. So to take a point, yes, some of those services, we do have exclusive distribution rights over satellite; some of them we have exclusive rights over the MMDS frequencies. We don't have any exclusive rights over cable and we don't have any rights or restrictions in relation to other forms of medium like LMDS or other frequencies or technologies that could be used.

PROF WOODS: We had evidence from Fox Sports which said that exclusivity premiums are paid under existing arrangements. They didn't name you, but you're one of the very few suppliers of Fox Sports.

MS WILDE: We actually don't have an exclusive contract for Fox Sports.

PROF WOODS: With Foxtel - well - - -

MS WILDE: Fox Sports.

PROF WOODS: Fox Sports. So they must have been referring to somebody else?

MS WILDE: Yes. I'm not going to go into too much detail on the terms in the contract, but we'll just leave it at that statement.

PROF WOODS: It does raise the question in the marketplace, what premium is a pay TV deliverer willing to pay for exclusivity for premium content, whether it be movies or sport, so as to differentiate themselves from other potential deliverers? Is there a market understanding of the multiples of base premium that one has to pay to get exclusive rights?

MS WILDE: I'll do a quick answer on that but I'm sure Bruce would probably want to comment. I think the brief answer is I'm not aware of that, of any sort of calculation or model or whatever for paying of a premium, but if it did exist in any other country in the world, I don't believe that that model would apply in Australia anyway because of the way that the industry has evolved here locally, a lot of which was dictated by the broadcasting services legislation and its restrictions placed on the development of the industry to kick start in the first place which was all government mandated, so it's not been a normal commercial evolution. So to the extent that there might be some models overseas, I don't think that they would apply locally. I'm not aware of any sort of analysis that we have done in terms of identifying what would be an appropriate premium to pay for exclusive content. Our view is that a lot of the content that is supplied to us is overpriced anyway.

PROF WOODS: Any elaboration?

MR MEAGHER: No, I think that's - - -

PROF WOODS: It therefore remains a mystery as to why Fox Sports would be talking about it - and it's not just once in their submission but on a number of

occasions - talking about the exclusivity premium paid under existing arrangements, ie, that it is occurring now, not a theoretical construct in the Australian industry but under existing arrangements. You're saying you have no knowledge of it from your perspective.

MS WILDE: There are definitely contractual provisions in place between Austar and Fox Sports in relation to the terms upon which we take the product. I really don't want to go into the details of those contracts. I don't think it's appropriate and I know for a fact that Fox Sports would be unhappy for us to go into the detail, just from past experience through our prospectus process with public disclosure of the terms. I'm not familiar with what the terms might be of any contracts that they have in place with Foxtel for their distribution, but I don't know that we could identify clearly what a premium might be, but then again it could be possible to construct a calculation of what a component of that might be for a premium payment in the event that there was an exclusive delivery mechanism there. I'm sorry if that's a very convoluted answer.

PROF WOODS: No.

PROF SNAPE: You would expect that there would be a premium, however.

MS WILDE: It would not be unexpected.

MR MEAGHER: It is a term that you might expect to see in the relevant contract, but I think from our point of view and from the point of view of the terms of reference of the inquiry in relation to regional Australia, that's not a situation that exists in relation to us and presumably not in relation to other people active in the regional market.

PROF WOODS: All right. We're aware that Foxtel is advising customers in Canberra that it is not intending to make its product available through Transact which is a cable roll-out, and instead, should people wish to obtain Foxtel pay television, that it would be by way of satellite dish and a particular set-top box in the home which seems a more expensive household connection fee than just sending it down the Transact line. We're aware of views expressed by Neighbourhood Cable, who would be in competition with you - I mean, you're not in the Canberra market, but Neighbourhood Cable is certainly in your patch, as they say, and they have expressed views of frustration of being able to obtain product in relation to sports and prime movies. So clearly there is some disturbance in the marketplace, but you're saying not you.

MS WILDE: I'll just make a small comment on that. We have undertaken some discussions with Transact ourselves - again, they're governed by confidentiality provisions - in terms of them putting content down their network. We've also been involved over the years in various conversations with Neighbourhood Cable in relation to access to program rights. As a general observation in relation to operators such as those people but not necessarily those operators - -

PROF WOODS: They're just examples.

MS WILDE: --- there seems to be a little bit of a field of dreams business case concept, "Build it and they will come. Build it and the programming will just automatically land on your network and you don't have to pay to get it there. You don't have to pay commercial rates to obtain it and get it to your customers." I think that's some of the problems that we at Austar have identified, that a lot of these smaller operators just simply don't seem to understand the economics of operating a pay TV business. It is expensive. If you build a network in a regional area, then the programming isn't automatically going to fall out of the sky onto a network. You generally have to pay to actually get the content onto your network and that costs a lot of money. It costs us a lot of money, and people just don't seem to - again generalising - really understand the dollars involved.

PROF WOODS: I did detect a little of your views here where you said:

Pay TV is an expensive business and we think a number of other operators have been looking for a free ride.

MS WILDE: Yes.

PROF WOODS: It puts neatly your view on that.

MS WILDE: I think that also endeavours to answer your comments earlier about the Transacts and the Neighbourhoods and things and it goes to these - I was just commenting a lot on the actual physical delivery of signal to networks, but also in relation to accessing programming and the fees that are payable to content providers or channel distributors in return for getting the rights to distribute your content on your networks, it's not cheap. I think that there seems to be some unrealistic expectations that just because people construct a network and they're there, that they should be able to get it at rates which frankly they may be asking - we don't know - for rates lower than the rates we've obtained and others obtained in the industry.

PROF WOODS: I guess what we're trying to ascertain is the distinction between "not available" versus "not cheap" and clearly that's not an area we can discuss with you. We need to be discussing it with the suppliers.

MR MEAGHER: That's right, but in the sense that there are no barriers in a - if you take Neighbourhood Cable, there are no barriers in the sense of us having any exclusive rights to prevent them from getting any of that material. There are no regulatory reasons why they can't now - you know, why wouldn't a content provider take another customer on board, and that presumably is a question of inability to - - -

PROF SNAPE: A very good question.

MR MEAGHER: I don't know what their motive is, but maybe they just can't reach commercial terms. That may be all there is to it.

PROF WOODS: We noticed that your relationship with Telstra has changed as you have gone from pay TV to moving into markets that compete directly with them and clearly these cable operators are also in markets that compete directly with Telstra. That's just an observation. Do you have any questions in that area?

PROF SNAPE: I note the sentence which you elaborated on in your introductory remarks that you don't agree with the view that the inclusion of pay TV in a bundled offering is essential to the roll-out of broadband infrastructure, but you do see that packages are necessary. Just to explore it again, you don't see that pay TV is a necessary part of a package in rural areas?

MR MEAGHER: No. Obviously it could be an attractive part of a package and certainly our business model uses it, but there would be other services, data and voice services, perhaps a model based on the business market - - -

PROF SNAPE: That's the business market, but what about the residential market, would it not be an essential ingredient to the residential market?

MS WILDE: We'd really like every consumer to think pay TV was essential actually in the residential market and regional Australia but - - -

PROF SNAPE: No, I wasn't saying to every household, I was saying as to rolling out the cable. I know rolling it out to every household is another matter. But rolling it down the streets - is not enough people coming on to pay TV an essential element of doing that?

MR MEAGHER: No, not necessarily. It really depends on the infrastructure. For a start, our view is that rolling cable in most of the places where we operate is not economic.

PROF SNAPE: I shouldn't have said "cable".

MR MEAGHER: An LMDS network or the 3.4 gigahertz spectrum that Unwired have acquired or the upgrade of the Telstra network to various DSL functionalities - there are business models that you could build for deployment of those networks in regional Australia which are not dependent on pay TV, where it could be an element but it need not be.

PROF SNAPE: But the DSL, as I understand it, is limited to, say, three to five kilometres, so that's quite a bit from - roughly speaking - the exchange. So the extent to which that can be rolled out is fairly limited. I was meaning beyond the DSL.

MR MEAGHER: Telstra claimed to be able to reach 90 per cent of the population or something with DSL. I don't know.

PROF SNAPE: The capital cities helped that.

MR MEAGHER: Yes, that's true.

PROF SNAPE: I'm thinking of the rural rather than the capital cities.

MR MEAGHER: Again, as I say, there are various other wireless alternatives that could serve those markets, including the LMDS frequencies, the 3.4 gig, and potentially the mobile networks as Third Generation and other technologies develop. As I say, we don't believe it would be critical to have pay TV as an element of that. There would be other new services that may well justify that roll-out. There may also be a - there's a business model that says you start in the corporate market and build critical mass and then move into the residential market. That's certainly the approach we're taking into the data business. We think the market will start in the small to medium enterprise market before it takes off in residential. I assume others have probably thought the same thought.

PROF WOODS: Or building out from an ISP base - big enough.

MR MEAGHER: Yes.

MS WILDE: And so if you take my sort of flippant comment before about, yeah, we'd love it if, you know, consumers thought that pay TV was a sort of an essential service or whatever but it really is a discretionary product and in that sense we wouldn't regard it as something that is an essential part of packaging with a broad band service. It's more, as Bruce said, something that goes to making some sort of bundle, you know, potentially more attractive.

PROF WOODS: Is your pay TV as a stand-alone business in fact profitable?

MR MEAGHER: Not today.

PROF WOODS: I assume that was a "no" for the record.

MR MEAGHER: I mean, we expect it will be profitable in time but it's not today, no.

PROF WOODS: Right. So you're looking for economies of scope of adding other product to the infrastructure.

MR MEAGHER: Yes.

PROF WOODS: You make an interesting comment in your last dot point of your last dot point which is that many program providers are overseas and accordingly there could be jurisdictional and practical issues in relation to declaring content. From a legal perspective are there not in all cases Australian distributors who would be captured by the process or - -

MS WILDE: No, there aren't, no.

PROF WOODS: Is that as a general proposition or is it just particular components that are not within an Australian distributorship?

MS WILDE: It sort of ties into an issue that was confronted through the Broadcasting Services Legislation with the Australian content regime where they were looking to impose on the pay TV industry set expenditure levels for Australian drama which tied back specifically to drama programming. One of the issues which I think did cause quite a lot of problem with putting the new regime in place, and frankly which still causes us a lot of problems with ongoing administration, is that you have locally produced channels with local content in them. You have local channel providers that purchase their content from overseas and compile that locally. You have other channels which are compiled completely overseas and frankly just the total completed feed is then just broadcast into the country and picked up and redistributed by the local operators and as a practical matter. It's difficult for us to conceptually try to understand how you actually could have an access regime for content that actually could work.

MS McCORMACK: In relation to the Australian content provisions there has to be special rules in relation to where you have what they call a pass-through provider, someone how is overseas, and all kinds of obligations had to be imposed on the licensees for something in which fact which they have often have no control over, being the amount of expenditure that is made on the content that's on the channel. That was the only way that the Broadcasting Services Act could in fact get jurisdiction in relation to those providers; was to impose obligations on the providers of pay TV like Austar which then have to be then passed through back to those providers overseas.

MS WILDE: Which we of course think is grossly unfair.

PROF WOODS: Of course, yes. I think that completes the particulars. As I say, we have read it albeit in the time we were provided. If there are further matters that we would like to explore with you our staff will be in contact. Also if you could reflect on today and provide additional material that can elaborate on some of those points that we were discussing, that would be helpful. Do I take it from your comments that your prospectus, while carefully negotiated with Fox Sports and maybe others as well, may at least give us as much as you are able publicly to put forward in relation to the nature of your contracts, in which case would a copy of that - - -

MS WILDE: We can definitely provide you with a copy of that or put together an extract of the relevant sections for you because it does contain a summary.

PROF WOODS: That would be helpful. As far as you were able to go in those circumstances.

MS WILDE: With a couple of statements in it. Yes, we can do that.

PROF WOODS: That would be very good because the more we can understand

those the better we are able to address the terms of reference, but I do find the difference between the position that Fox Sports was putting and your own particular circumstance raises more questions than it solves at this point.

MS WILDE: Perhaps I'm taking a more conservative view in responding to your questions or maybe we need to go and have a chat to Fox Sports about what they have been saying, I don't know.

PROF WOODS: Their submission will be on our site but I'm sure they would also make it available to you.

MS WILDE: Yes.

PROF WOODS: But there just seems to be something we need to resolve in understanding how the marketplace is actually working.

PROF SNAPE: If in, as you are putting together your submission beyond what you have here, it could be helpful if you could have a look at one or two other submissions that we have been receiving and also some of the transcript of the last two or three days, that you may wish to respond to - - -

MS WILDE: Would there be any particular ones you think would be - because we are aware of some of the - for example, the Optus submission.

PROF SNAPE: Yes. Maybe we would have a chat to the staff afterwards or we may have a word to you. For example, in relation to Fox Sports, also Optus, are two that come to mind pretty readily, but you might also like to have a look at the transcript and a discussion not only with those two but also with Telstra.

MS WILDE: Okay.

PROF WOODS: The transcript should be on our Web site within three days.

PROF SNAPE: Sure.

PROF WOODS: Are there any concluding matters you wish to put to us?

MS WILDE: I'm tempted but -

PROF WOODS: Feel tempted.

MS WILDE: It's just one other point which we have got in there just as a dot point is where Austar is in a position where it has had to go out and sort of build the business up from scratch and develop the category and effectively be in a situation where we were negotiating without any, for want of a better term, power behind us because we didn't have any customers and we were rolling out the business, we have sort of come up with certain commercial deals. Now, if the goal posts were now to be moved and an access regime was put in place in relation to content that might

unfairly disadvantage new players, you know, we would be I think quite disadvantaged there because we would be tied into our existing commercial contracts and wouldn't initially get the leverage that some of the new people have got. So obviously that's something that we at a commercial level would have a keen interest in the outcome.

PROF WOODS: I did read that point in your submission.

MR MEAGHER: I think that goes back to the whole - I think an earlier issue of how did we get to where we are in terms of content pricing. Clearly the whole industry began at a disadvantage in relation to the content suppliers and entered into - that hopefully changes next time there's a content negotiation but certainly the bargaining position when those original deals were struck was much different, much weaker.

PROF WOODS: Did the hard yards. Thank you very much to Austar. We appreciate your evidence and your continuing assistance to this inquiry. Our next participants are the Australian Telecommunication Users Group. If they could come forward please.

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PROF SNAPE: Our next participants are the Australian Telecommunication Uses Group. Welcome. If you could please identify yourself by name and your position in the organisation.

MS SINCLAIR: I'm Rosemary Sinclair, the managing director of the Australian Telecommunications Users Group.

PROF SNAPE: Thank you very much. ATUG has been a very active member of this inquiry and we have been very grateful for the submissions and contributions that have been made during this process and we thank you again for yet another thoughtful and extensive submission that you have made, in a very timely manner too, I might add, to the benefit of our other participants.

PROF WOODS: It has actually got a cover on.

PROF SNAPE: As well, yes.

PROF WOODS: It's the only one I think which I have a cover.

PROF SNAPE: Yes, it's done well. So thank you very much to ATUG. Is there an opening comment you wish to make?

MS SINCLAIR: Yes. I would just like to stress really for the record the role that ATUG plays in the industry which is really to represent the end user's interests in what is a self-regulating industry, and of course we're focused on securing better outcomes in terms of product price and performance for end users. So the views that we have expressed in our previous submissions, and indeed today, are really based on that end user experience of the market. As you note we have been participating in the industry for 20 years. We think the history that has got us here today is very relevant. Full competition is only four years old. We still work in the industry by way of the ACIF working committees and reference panels, make various user focus submissions to all sorts of bodies, inquiries and forums. We work closely with a number of other industry associations such as SPAN.

As a general principle we would support the reduction of regulation and we're very supportive of the self-regulating base of this industry but we think at the moment the industry has got a way to go yet in terms of delivering practical competition in the marketplace to the end users. We think by and large the policy framework that we have got at the moment is okay but the implementation of that in practical terms is not quite there yet. In different services there are different levels we think of competition and different sizes and shapes of players in the marketplace. So we have got a number of issues which we canvass in the document. The most important ones for us though are the time it takes to get decisions about products and prices which involves as a consequence delay for our end user community in terms of accessing new products or getting reduced prices, the benefits of competition.

We think there's a way to go given that it's a self-regulating industry in terms of the relationship between participants. The carrier to carrier relations seem to be more difficult than we would have hoped given the self-regulation face of the industry framework, and we would like to see some more emphasis on commercial processes in coming to decisions and outcomes rather than formal and legal processes. So that's all I wish to say by way of opening comment.

PROF SNAPE: Thank you. We know that ATUG has long supported a greater cooperative model within industry and it remains one of the hallmarks of your perspective. We note in part though in observation that the development of the industry particularly since 1997 has led to an over-emphasis on shareholder value, company profits and share price rather than end user service. I'm just wondering to what extent telecommunications is any different in that regard as, say, banks, airlines or other such industries or whether this is a commonality to those industries.

MS SINCLAIR: Would you mind just telling me where you're reading from?

PROF SNAPE: I'm on your page 2, third paragraph.

MS SINCLAIR: Yes. Look, as a general response to you, I think that the share market has had influence on a number of industries in ways that perhaps weren't foreseen. I suppose my comment there is reflective of the aftermath of the dot com bubble bursting where there seemed to be endless amounts of money to fund things that were being valued on potential revenues rather than really underlying value of business growth through product and customer service issues. So as to just how different it is with other industries I can't really comment.

PROF SNAPE: Okay, thank you. You mention at 3.2 on page 3, last sentence of the first paragraph under 3.2:

ATUG is concerned that the PC does not appear to have assessed Australian telecommunications prices, both wholesale and retail, against international benchmarks.

I was a little surprised at that in that we quote from, and have produced, a document International Benchmarking of Telecommunications Prices and Price Changes and another one, International Benchmarking of Australian Telecommunications Services. We had felt that we had produced those documents in the commission. We have quoted from those in the report. I'm wondering if there's something more that you were expecting in that area.

PROF SNAPE: There will be another one shortly too in benchmarking.

PROF WOODS: Indeed.

MS SINCLAIR: Right.

PROF SNAPE: Within Australia and in a number of other countries, the relative price in performance of urban versus rural and remote services in those countries. That's another benchmarking study that will be out shortly.

MS SINCLAIR: Yes.

PROF WOODS: Which you weren't to know of but the other two are certainly both available, are quoted, and are referenced in our documents. I was wondering what was behind that remark.

MS SINCLAIR: I think what I was saying is that albeit that I was aware particularly of the 1990 report, I guess I was looking for more visibility throughout the document.

PROF WOODS: Yes, these two are 1999 so they're quite recent but if you're saying not so much - your statement here does not appear to have assessed. Perhaps what you were reflecting is that you would have liked to have seen higher profile in that area.

MS SINCLAIR: Yes, and perhaps - the sources that I use is the work that Paul Budde does when he is, you know, continually bringing out international comparisons and we look at those. It's quite a technical art of course so your 99 document is - - -

PROF WOODS: Two of them. They are both up on our Web site so if you would like to avail yourself of them that may assist you.

MS SINCLAIR: I will, yes.

PROF SNAPE: I think that technical detail that is in those benchmarking studies and will be in the one that is coming shortly are indicative of the difficulty of doing benchmark studies. I think one should be very wary of straight comparisons that don't go into the sort of detail that are incorporated in there. It is in fact a very, very difficult task and necessarily then becomes rather technical.

MS SINCLAIR: That's true, although when I'm talking to members of ATUG of course they see these things in rather more simple terms than when they're comparing themselves to their competitors.

PROF SNAPE: Yes, that's exactly the trap of doing so - to do it in simple terms because it isn't simple - and that to compare like with like is extremely complex when the countries are different et cetera.

MS SINCLAIR: Yes.

PROF SNAPE: The simple comparisons are almost certainly going to be misleading.

MS SINCLAIR: That's true, but as I say when my members are looking at their communications cost elements in their expenses and comparing themselves with what they regard as their like competitors internationally then they make these sorts

of comments.

PROF SNAPE: I was really suggesting there might be a negative educative function to your members on those matters.

MS SINCLAIR: Well, there may be, although if I look at even the information in this 99 result, and I'm considering the mobile phone market, then there is some indication here that there is a bit of a way to go in the Australian mobile phone market in reducing prices.

PROF SNAPE: That's true, yes. In the context of what was said there it's true - I mean, since we're on the record.

MS SINCLAIR: Yes, so it's accepting all the complexity, we still come to the same result as they might do on much less robust basis.

PROF WOODS: Okay. Anyway, we draw your attention to those studies and hope that they assist. You suggest at 4.1 on page 4 in your third paragraph that timeliness of outcomes must be a key element of the commission's final recommendations. Again, the matter is dealt with at some length at 5.20 and at 6.10, 7.20, 9.29. I was wondering if you could assist us in understanding again to what extent and where we have not identified speed as a significant criteria in developing up our recommendations.

MS SINCLAIR: I don't think that I was suggesting that you hadn't identified it. I think I was rather supporting the concerns, you know, expressed in the report and throughout the industry - - -

PROF WOODS: Excellent.

MS SINCLAIR: - - - but adding the perspective from the end user which says that this is also a very important issue for us.

PROF WOODS: So we're at one in that; that it is commonly agreed as a key - - -

MS SINCLAIR: To be a problem, yes.

PROF WOODS: --- element in the nature of telecommunications that needs to be addressed. That's helpful, thank you. I would appreciate your views on our proposition that we move from an object clause based on the long-term interests of end users to some variation of either overall economic efficiency or overall welfare. Is that a shift in perspective that would be support by ATUG?

MS SINCLAIR: Not really. We actually, not surprisingly, I would think, are pretty keen on the retention of the long-term interest of end users as part of the regulatory framework. We think that that's a useful addition in fact to the economic efficiency basis which is in fact reflected in the legislation but we think it captures some of the specifics of this industry and whilst the industry is moving toward

competition we think that it's important that the user's interests are included in the decisions and deliberations about the regulatory framework. Once you got this industry to perhaps a more competitive basis then you might be able to rely on broader based principles such as economic efficiency to catch everything but at the moment when we are still very much, I think, in the phase of promoting competition in this industry where we're focused on any-to-any connectivity as a real issue, then we think that the long-term interest of end users should stay as part of the regulation.

PROF WOODS: In relation to XIB, you don't support its repeal or even the weakening of it. What sorts of behaviours do you feel that XIB should be addressing that the ACCC is currently not so doing? You say that ATUG would have liked the ACCC to have acted more promptly and decisively. Sorry, I'm on page 5, 5.1A.

MS SINCLAIR: We were really looking there at again the time for various decisions. The one that is really not finalised yet, albeit that it's the ACCC's decision which is being appealed is the PSTN interconnect decision, we also reviewed the matter of the peering arrangements and the intercarrier churn and felt that they were examples where perhaps another prompter and more decisive approach could have produced a speedier result.

PROF SNAPE: Yes. At the bottom of that page you have got Telstra - you're questioning our acceptance of the view that XIB could result in the reduction of investment in the infrastructure in Australia and in the future. It's something on which it's very difficult to get hard evidence. You can readily see that one side would say, "Yes, it has," and the other side would say, "No, it hasn't." But to get firm evidence is pretty difficult.

MS SINCLAIR: Yes.

PROF SNAPE: Do you have any strong grounds for the supposition, the statement, that you believe that if Telstra has made such a decision it has done so for reasons unrelated to the problems it perceives arising from XIB?

MS SINCLAIR: One of the documents that I used as part of my own thinking about this particular issue was an analysis put out by Deutsche Bank on just this very issue of levels of capital investment by Telstra. They make the point that in fact their prediction some time ago was that there would be reduced competitive pressure in the market and that this would reduce the rate of capital expenditure in this market. So another reason for this is perhaps that as capital is becoming less readily available competitive pressure is reducing on Telstra, and that is a reason for reduced capital expenditure. Their argument is quite interesting and they do some historical analysis of capital expenditure rates of the various carriers. Indeed, in another of their articles they compare the Australian situation to foreign, US and European experience.

PROF SNAPE: Yes. I think if you could supply us with any evidence that you have on that, it would be helpful.

MS SINCLAIR: Sure.

PROF SNAPE: What is terribly difficult there of course is to find out what the counterfactual is, what would have happened but for this.

MS SINCLAIR: Yes, that's right, but I think there would be - well, there's the possibility any rate of a range of other interpretations apart from people's concern about XIB.

PROF SNAPE: Yes. You do refer over the page to a statement from Telstra's CEO that it intends to decrease its dependence on the Australian market and you're suggesting that's because overseas markets have greater potential for profit than the Australian which seems a reasonable argument for why it would occur but you don't - and you say you're surprised that Telstra has not focused on growing its Australian business by promoting new uses and applications. You don't think, however, that the current regulatory framework in Australia might be responsible for Telstra viewing its operations overseas as having a greater return than in Australia?

MS SINCLAIR: It may be. I find it difficult to accept though that there isn't the possibility of regulatory difficulty in those overseas markets equally as there is with a concern perhaps about regulation of this market.

PROF SNAPE: I suppose then to follow up some of the line of argument that Henry Ergas was putting just before lunch, that you might say if you're then trying to spread your regulatory risk, if you do think that there is regulatory risk, then one way of spreading it would be to go into differing markets with different regulatory systems.

MS SINCLAIR: That could be true but it's - I mean, I think it's a difficult circumstance when we're trying to develop a competitive market here for the benefit of Australian businesses. To really accept the proposition that it's the regulatory framework here that's so untenable that investment has to be taken offshore - - -

PROF SNAPE: No, I wasn't saying so untenable. I mean, there are degrees in this. It's not as if they're stopping to invest here. It's in fact a shift that you were referring to and so it's not untenable. You could say it's a matter of risk. They would be wanting to diversify their risk. They have a responsibility to their shareholders.

MS SINCLAIR: You could, which takes us back to the discussion, I guess, of how do you trade off the responsibility to shareholders to produce a result by that sort of strategy versus producing a result by growing the business, having customers who are satisfied with your products and services and using more of them.

PROF SNAPE: At the bottom of that page you talk about a purpose versus effects. Do you think that section 46 should be amended to effects rather than purpose?

MS SINCLAIR: I think that's a question beyond my expertise. I would have to admit to not being intricately familiar with how 46 has worked to know whether that would be a good result out of these deliberations.

PROF SNAPE: Okay.

PROF WOODS: Page 8, the second half of that page refers to again the matter delay and you believe, as you've been saying beforehand, that access providers and access seekers should, wherever possible, reach agreement through commercial negotiation rather than through arbitration and certainly that's been a very consistent line of ATUG over a very long period. You then say, "ATUG had hoped that the PC would have addressed this problem in its review." Again, I'm not quite sure what guidance you're wanting to give us - I draw your attention to chapter 9 which is an extensive discussion of this question of how to facilitate commercial negotiation, where we raise things such as multilateral negotiations, publication of information, we explore various models of decentralising decision-making, roles and incentives for commercial negotiations and conclude with seeking further views on this very difficult issue. Now, if that hasn't sufficiently covered the topic, I'd appreciate your guidance on what more you're expecting of the commission in dealing with that topic.

MS SINCLAIR: I think if you go just two paragraphs down then we make a suggestion about staying within the existing regulatory framework but perhaps using the ACIF organisation, who already have some expertise in getting multilateral outputs, albeit that we then have some problem with sign up and compliance to those outputs. But we think that that is the beginning at any rate of a forum in which there could be some encouragement for commercial negotiation and mediation.

PROF WOODS: Yes. We've spoken to ACIF ourselves and have been impressed at the way in which they've been able to address, albeit technical matters rather than commercial competitive matters which seem to elicit a different behaviour by industry members. I was just seeking your guidance on your statement that you would have hoped that we would have addressed this problem. I had felt that we had addressed it, and in some detail, but was looking from some guidance from you as to where further to take it.

MS SINCLAIR: I think the only guidance that I would be so bold to make or suggest - and you're right, it's been discussed fulsomely in the document - was to come to, as I say, a way of resolving the problem within the regulatory framework that we've got.

PROF WOODS: Thanks, I understand that position.

PROF SNAPE: We would like to do that too. It's not for want of trying.

MS SINCLAIR: If we all keep at it, presumably we'll get there eventually.

PROF WOODS: You make a proposition that the legislation should give ACCC the power to direct an access provider to submit an access undertaking for each declared service. I can understand your thinking of that. I guess the question then arises that if that undertaking is unacceptable to the ACCC, where to from there?

MS SINCLAIR: Well, indeed.

PROF WOODS: We've had experience of several undertakings and none of which the ACCC sort of said, "That's terrific. We're so pleased you've done that. Thank you very much, we'll now proceed in a timely and efficient manner."

MS SINCLAIR: It's certainly a difficulty because if you start with self-regulation as the basic philosophy in this industry, then undertakings would be a great way to go. Our basis here was to try to get some speed into the process which perhaps makes it a tad less voluntary than it is now, but we are then left with the problem of, "What do we do if we can't get agreement on these things?" I suppose it comes back to a philosophical position that ATUG has that really the market is big enough, not huge by world standards but big enough and if there were a different approach to solving these problems then the emphasis would be on growing the market overall, rather than arguing about the bits of a pie whose size we know now.

PROF WOODS: We encourage you to keep putting forward that philosophy, but we also must try and encourage the industry participants to sign up and to look at minimising regulatory intervention to sort of core bottlenecks but recognise also that wherever you have regulation you have gaming of that regulation and to be conscious of how the industry participants may use the regulation. We notice though that you do sign up to the abolition of the TAF. We put it forward tentatively, we haven't had outcries of rage from anybody at this stage to say what a dreadful suggestion.

PROF SNAPE: Indeed we've probably got more unanimity on that recommendation than any other. We only put it forward tentatively.

MS SINCLAIR: My understanding is that there is a fair amount of unanimity on the apparent inability of that body to get past the initial work that it did.

PROF SNAPE: Yes.

PROF WOODS: Do you have other - - -

PROF SNAPE: No.

PROF WOODS: Are there matters that you'd like to particularly draw to our attention that we haven't covered in this discussion?

MS SINCLAIR: Let me just go back to my notes. There are a couple of particular issues or one particular one that we haven't touched on at all and that's the issue of the unconditioned local loop pricing which we see as quite a problem. It takes me back, I guess, to this issue of, "If we could just get on with it then we could grow piece of this market quite substantially." We don't seem to be able to. My understanding of the price that's on offer to other carriers is \$63 a month which, given the costs that they have to incur, makes that uneconomic. I guess it's just a

current example of the sort of difficulty that we have in moving to a competitive environment where people are getting on with the business of the business rather than discussing things that seem to take a long time to come to conclusion.

We've also got a concern about the lack of competition, as we see it, after four years in the CAN, the local loop area of the business and we would say that the competition we've seen in even mobiles, putting aside my comment about price, but mobiles, international, data and even Internet dial up has produced good outcomes for end users in terms of the number of players and the product offerings and the prices. But we think that while the local CAN is not more competitive, then there's a significant impost on users. For example, Telstra this week announced the price increase in business line rentals and certainly for some customers that will come with a rebalancing of call charges.

For other customers who think they're enjoying the outcomes of competitive environment they will simply take a price increase from a part of the business that when we do the analysis using your figures is not looking to be on a terrible downward spiral for Telstra. So there are a couple of areas where we see that we haven't really got to the competitive environment that I think we would all have hoped and that really informs our perspective that we're not yet at a position where we can do away with the industry-specific regulation. It's that rather than a position which says we don't like the application of the general provisions. Our position is really that we think there is a way to go before we've got a competitive market in this industry. Whilst that's the case, we need mechanisms, not so much for capturing different sorts of behaviour, but for responding differently. We think that's what the industry-specific regulation gives; it gives a different way of responding.

PROF WOODS: Thank you very much. That's quite useful.

MS SINCLAIR: Thank you.

PROF WOODS: That concludes the presentation from ATUG. Are there any persons present who wish to address the commission? That being the case, I call to a close the hearings into the Productivity Commission's draft report into telecommunication-specific competition regulation.

AT 3.48 PM THE INQUIRY WAS ADJOURNED ACCORDINGLY

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