COMMONWEALTH OF AUSTRALIA

JOINT STANDING COMMITTEE

ON

FOREIGN AFFAIRS, DEFENCE AND TRADE

(Defence Subcommittee)

Reference: Inquiry into level of funding for Defence

CANBERRA

Wednesday, 6 August 1997

OFFICIAL HANSARD REPORT

CANBERRA

JOINT STANDING COMMITTEE ON FOREIGN AFFAIRS, DEFENCE AND TRADE

(Defence Subcommittee)

Members:

Senator MacGibbon (Chairman)
Mr Ted Grace (Deputy Chairman)

Senator Ferguson	Mr Bob Baldwin
Senator Sandy Macdonald	Mr Bevis
Senator Margetts	Mr Bradford
	Mr Brereton
	Mr Brough
	Mr Dondas
	Mr Georgiou
	Mr Hicks
	Mr Lieberman
	Mr McLeay
	Mr Price
	Mr Sinclair
	Mr Taylor

Matters referred:

To inquire into and report on:

The level of funding required to ensure that the Australian Defence Force is equipped, trained and maintained to a level necessary to provide for the defence of Australia as principally defined by a strategic guidance, with particular reference to:

. equipment and facilities on order; equipment and facilities to implement essential new capabilities; equipment and facilities required to replace obsolete material and for which no alternative technology is appropriate;

. training to achieve appropriate and sustainable levels of preparedness of personnel;

. operational activities and capabilities necessary to support Australia's foreign policy, regional engagement, regional stability and UN support;

. stockholding requirements for weapons, consumables and maintenance spares;

. research and development to ensure continued development of Defence capabilities, to adapt foreign technologies to Australian conditions, and to provide the

knowledge essential for Defence to remain an informed intelligent customer;

. essential management and administrative overheads required for the efficient management of the Defence organisation.

WITNESSES

JOINT STANDING COMMITTEE ON FOREIGN AFFAIRS, DEFENCE AND TRADE

(Defence Subcommittee)

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Present

Senator MacGibbon (Chairman)

Senator Sandy Macdonald	Mr Hicks
	Mr McLeay
	Mr Price
	Mr Sinclair

The subcommittee met at 11.07 a.m.

Senator MacGibbon took the chair.

[11.07 a.m.]

BRABIN-SMITH, Dr Richard, Chief Defence Scientist, Defence Science and Technology Organisation, Department of Defence, Anzac Park West, Canberra, Australian Capital Territory

CHAIRMAN—Welcome, Dr Brabin-Smith. I must advise you that the hearings here today are legal proceedings of the parliament and warrant the same respect which proceedings of the respective houses of parliament demand. Although the subcommittee does not require you to give evidence on oath, you should be aware that this does not alter the importance of the occasion and the deliberate misleading of the subcommittee may be regarded as a contempt of the parliament. The subcommittee prefers that all evidence is given in public but should you at any stage wish to give any evidence in private, you may ask to do so and the subcommittee will give consideration to your request.

Your submission has been received and authorised for publication. Are there any additions or corrections to that submission?

Dr Brabin-Smith—I would be happy to make a brief statement if that would help set the scene. Like other areas of Defence, DSTO has undergone extensive reforms over the past several years. The pace of reform initially picked up in 1987, so we are well into our 10th year of continuing change.

Defence's reform programs of the early 1990s, in particular the force structure review, affected DSTO and its level of funding. I am pleased to be able to say that, although the funding trend during the 1990s has been downwards, our ability to deliver science to the ADF through a series of micro-economic reforms within DSTO has trended upwards.

I should mention the three major areas of reform. The first has been a simplification of structures by reducing the number of laboratories and research divisions and by providing common or shared services across the program. The second has been the focus on communicating the results of our work in terms that the ADF and defence policy areas could better understand and on improving the mechanisms whereby priorities were set. The key concept in this area of reform has been transparency. The third major area of reform has been an overhaul of DSTO's culture to increase the focus on defence related outcomes, to increase the identification with and understanding of Defence, and to reinforce a spirit of cooperation between the research divisions and laboratories.

During this period, we have simultaneously emphasised the notions of responsiveness to the Defence customers for our work, partnership with these customers, and seeding and shaping their perceptions and priorities for technology. We have also taken advantage of the commercial support program to gain efficiencies through the market testing of non-core functions.

I am pleased to be able to say that the benefits of this reform program were such that, when DSTO was subject to examination in the recent Defence Efficiency Review, it came out with a clean bill of health. DSTO's research heartland remained untouched and was supported in terms of more modelling and simulation and a program of concept or technology demonstrators. On the other hand, some of our support functions are being transferred to other programs, thus constraining DSTO's opportunities to benefit directly from further efficiencies in such areas.

DSTO's objective is to give advice that is professional, impartial and informed on the application of science that is best suited to Australia's defence and security needs. This advice, and the scientific research that underpins it, is very diverse and not easy to summarise.

I can, however, outline some of the principles that apply in the setting of priorities. While no single criterion can be said to be absolute, the most pervasive criteria are those which derive from the principles of self-reliance. In brief, we tend to focus on those areas where our friends and allies are unable or unwilling to provide what we need—that is, where our Australian needs are sufficiently different from those of others or where there are particular security sensitivities.

In this respect, we find that the following themes recur: support for intelligence, surveillance, electronic warfare, communications, information technology and exploitation of environmental information, including acoustic and electro-magnetic propagation; signature management; operational research, human factors, and combat for modelling and simulation; systems and systems integration; advanced materiels, especially for through-life support; and an understanding of the strengths and weaknesses of our own key weapons and sensors, and of those which might be used against us.

I should mention also longer term concerns about proliferation of weapons of mass destruction and, picking up a theme from the Efficiency Review, an increased program of concept or technology demonstrators, especially in the fast moving high technology fields. That is an introduction. I would be more than happy to respond to your committee's questions.

CHAIRMAN—Thank you. What is your budget at the present time?

Dr Brabin-Smith—It is of the order of $230 million. It will reduce in the context of the additional estimates when about $20 million will transfer to other programs, especially the Defence Corporate Support Program and Defence Estate Management.

CHAIRMAN—What is that as a percentage of Defence outlays currently?

Dr Brabin-Smith—It is of the order of 2.3 per cent.

CHAIRMAN—Putting that in an historical perspective, is 2.3 per cent the figure that has been maintained for a 15- or 20-year period?

Dr Brabin-Smith—Probably not. I do not have an answer to that specific question. I can comment off the top of my head. I can take questions on notice if you would like me to. The period from the early 1990s to about now has seen a reduction in our budget of something like 18 or 19 per cent. But over that period—and this is the point I alluded to in my opening statement—we have gone to town in a big way on improving the management of DSTO. As a proxy measure of our ability to deliver science, the number of professional scientific staff over that period has increased.

CHAIRMAN—So have you suffered a cut of about one-fifth broadly in your budget in the last five or six years?

Dr Brabin-Smith—Yes.

CHAIRMAN—Have you any idea what the figures were through the 1970s and the 1980s?

Dr Brabin-Smith—No, I do not. It would be difficult to reconstruct that because some of the functions that DSTO then had have been placed elsewhere. For example, if my memory serves correctly, DSTO had a major role at Woomera which then went off to other programs. The Central Studies area went into what is now Australian Defence Headquarters. So it would be difficult to reconstruct the past in a way which you could be confident was measuring the same things.

CHAIRMAN—On the forward estimates for the next five to 10 years, what growth rate is planned in the DSTO budget?

Dr Brabin-Smith—The budget remains virtually static, setting aside the change I mentioned from transferring some support functions. You would perhaps be disappointed if I were not to say that I will be bidding for what I would regard as a fair share of the spoils from the Efficiency Review. It is a bit early in terms of process for me to say how much I will be looking for, or indeed what my chance of success would be, but I would like to think that the case we will put forward will receive a sympathetic hearing.

CHAIRMAN—Surely the validity or otherwise of the budget for DSTO stands, independently of the Defence efficiency review. It is a national requirement.

Dr Brabin-Smith—Yes, that is true; but in terms of one's ability to win arguments, it is easier to do so when there are funds not yet allocated in the five-year forward program.

CHAIRMAN—Can we deal with the rough breakdown of the expenditure of this

budget of $210 million. We had advice that it was going to be around $210 million in the additional estimates. Could you break it up into areas of expenditure such as aeronautical, marine, materials research and the rest of it?

Dr Brabin-Smith—Let me offer you this dissection. In percentage terms, we expect over this year to spend 26 per cent of our budget essentially supporting the Navy, 25 per cent supporting the Air Force, 27 per cent supporting what we call the policy and command areas of Defence—that is the Defence Headquarters, the intelligence function and one or two others—and 13 per cent supporting the Army. The remaining 9 per cent relates to the work which we sponsor ourselves within DSTO.

Let me explain that a little more. These percentage figures that I have given you relate to the tasking system that we have put in place, whereby our work is put into packages and these packages of work are sponsored by some other area of the Defence portfolio. I mentioned 26 per cent supporting the navy. That would be the summation of the expenditure relating to tasks for which there is an identified naval sponsor. So the remaining 9 per cent is the work for which there is not an external sponsor but which is more speculative, and which we sponsor ourselves within DSTO.

CHAIRMAN—Surely a functional analysis would be more appropriate, would it not, with respect to communications and sensors and electronic warfare?

Dr Brabin-Smith—We have tried several ways of presenting this kind of data over the years, and I judge that this present one is turning out to be the most effective. I should explain that within those five areas that I have just mentioned, we then have a further disaggregation. For example, in the case of the work that supports the Navy, we then disaggregate that into the following headings: command and control, support for the submarine force, support for the surface combatants, aviation, mine counter-measures, afloat support, logistics and training. Although I cannot easily give you the figures over the table, we have the information to show to the Navy and to anyone else who is interested what level of support, in dollar terms, goes into those particular areas.

Indeed, picking up your point, we have a matrix presentation which says how much in which particular broad technology areas goes to support each of those naval areas. For example, I could tell you how much of the support to the submarine force is in the area of surveillance or operational effectiveness or counter-measures. We have such a set of disaggregations and matrices for all the areas in which we support the Defence organisation.

CHAIRMAN—The reason I asked the question on categorisation was that it seems to me that if you have discrete areas for navy, army, air force and the rest of it, then it is very hard to introduce new areas of activity and get funding for them. There is an inherent rigidity in that. I am thinking of things that have a corporate interest for Defence, such as theatre missile defence programs and chemical and biological warfare, both of which will

be of high priority to all defence forces in the next 10 years. How are you going to include those in a program like this?

Dr Brabin-Smith—The percentages I gave you will, at least in theory, vary from year to year. Within each area we have a very rigorous and sometimes intense debate between DSTO and the relevant sponsor—for example, the Navy—as to what their priorities for our supporting the Navy are. Then we have a process that looks at the margins of how we will change the allocations between the various areas. Making those changes can call for advanced negotiating skills to make the loser happy with the result. Empirically, again, I am pleased to say that it works reasonably well.

CHAIRMAN—Let us take the matter of chemical warfare, which is topical in the light of the Iraqi associations in the Gulf War. Given the ready availability of all the chemical precursors for noxious agents and the relative simplicity of the fabrication of those precursors into the chemical agents of warfare, what expenditure do you see Australia being required to make to cope with this circumstance in the next decade? Can you quantify the amount of money that you are going to put into something like that, if you are going into it at all?

Dr Brabin-Smith—I do not have the information to hand. Let me tell you what my perspective is on this specific issue. We have a small but expert group of people in the NBC defence and disarmament group. They are part of the Aeronautical and Maritime Research Laboratory. Their focus for many years has been mainly on defence against chemical weapons. Although they are small, the quality of their work is recognised by those countries with whom we deal on such things, namely the United States, the United Kingdom and Canada. Although the amount of work we do is small, it gets a significant leverage into the programs and thinking of these other countries. We do not do much work on defence against nuclear matters. The trend there, in any case, is away from nuclear explosions more towards the spectre of radiological weapons. That is to say, conventional explosive would be used to scatter radioactive material.

Turning to biological defence, in the early 1990s—I forget the precise year—the government clarified what the policy should be on DSTO's ability to conduct work into defence against biological weapons. Specifically, the government agreed that we could work on defence against toxins. I have a suspicion, Mr Chairman, it is rather more your field than mine. Toxins are basically chemical warfare agents, even though they can be of biological origin, and they are covered in the Biological Weapons Convention. Because of the potential political and public sensitivities over anything in the biological and chemical defence world, we went to particular pains to clarify what the policy was.

We did this as a first step, in my mind, to see how much further down the track building up our expertise in biological defence should go—and I am currently thinking of that. I would expect—and this is in anticipation of a final conclusion and also in anticipation of my getting support from my colleagues in Defence and then taking it to

ministers—that we could mount a case which would say that we would increase our expenditure in biological and chemical defence. The United States, for example, has a very strong concern over the proliferation of weapons of mass destruction and this was expressed most recently in their Quadrennial Defence Review.

To come back to your question on resources, I do not have a precise figure. We will only ever work in niche areas and, through working in niche areas, we will then get leverage from our friends and allies.

Mr SINCLAIR—We have had a number of people who, in the brief public hearings to date, have suggested that we really are nowhere near spending as much as we should on research and development within the ADF. Have you any views on that? You would like more, I know, but do you have any views in terms of adequacy of effort and generally on how you see our capability? How do you regard our research effort?

Dr Brabin-Smith—I would welcome more money being available to be spent on defence related research and I believe that I can mount a good case for that. The following are the kinds of areas where I am at least contemplating increasing effort. One is increased analytical and scientific support for land operations. We have recently formed a Land Operations Division within DSTO and, if we are to support the initiatives for restructuring of the army to the extent that I believe they need to be supported, we will need to put more resources into that area. Then there is the general focus in the field of command, control, communications and information warfare and surveillance—you will have heard the term 'revolution in military affairs'; those are key technology areas that it will be important for the ADF to be very strong in. Another area is increasing the level of operational research, especially at the theatre level.

Another aspect of information warfare is in the more overt forms of attack using non-nuclear electromagnetic pulse and possibly directed energy weapons. I see that there will be a continuing need to focus on understanding the strengths and weaknesses of key weapons and sensors—that is to say, counter measures, counter counter measures—and included in this is increased signature management. The materials out of which defence platforms will be made will continue to advance and therefore we will need to keep across the strengths and weaknesses of new materials.

Human factors are going to be important. As we look into the future, it becomes entirely credible to see that we could be involved in conflict in which both sides of the battle have comparable platforms, weapons and sensors. One of the areas in which we would expect to gain an edge is by being much more competent at what you might call man-machine interface, including the kinds of cognitive processes that go into command and control. Other areas are more advanced modelling and simulation—these are powerful tools that are becoming more powerful with the advance of computing—and, as we have discussed, at least some effort going into defence against biological weapons.

Mr SINCLAIR—One of the problems that we have had in the past has been the development of the research undertaken by DSTO. Do you see it as a major barrier to our allocating much more resource to research? Project Nulka, for example, has been around almost since I was a boy. That is the project that you launch off a ship—

Dr Brabin-Smith—I see DSTO's role as being much broader than the design and development of new weapons and sensors which is why I focus, not always with my colleagues' agreement, on the notion that our job is to give scientific advice; but, because of the nature of science, that science has to be backed up with scientific investigations and research, and in some cases research and development. Putting in place a priority setting mechanism has proved quite difficult when it comes to the potentially expensive business of designing and developing new equipment, but I think we are now a lot more at home with the notion that this focuses on self-reliance. The general field of our interaction with industry is one of great complexity and often difficulties, and in many respects is the most difficult one to get right.

You mentioned Nulka. I remember when that was a good idea being talked about in the late 1970s, so it will have been something like 20 years between the initial concept and the system actually entering service. I do not believe that that is extraordinarily long, however, for a system as complex as Nulka, in the field of electronic warfare and with a very sophisticated system control aspect. I do not think that is long compared to international experience. I recall being told recently that, for example, during the Cold War the average time to get a new piece of equipment into service in both the Soviet Union and the United States was about 17 years. I do not think we are too badly adrift on that one.

Mr SINCLAIR—What about the capacity to coordinate with private enterprise, particularly given the commercialisation of so much of our procurement? In other words, can they add to your legs by undertaking some parts of the research? In your wish list here, you have a number of areas—key weapons and sensors, perhaps in the field of materiel, human factors, modelling and simulation—in IT generally in which I would have thought you might be able to go into a partnership with private enterprise. Have you done so? Is that practical and why is it different, for example, from going into a partnership with the Americans or the Brits or somebody else?

Dr Brabin-Smith—We do have partnerships with industry and while the record in some respects is patchy I take the view that, over the past few years, we have managed to get the relationships on a much better footing, both broadening and increasing the substance. Industry's capacity to conduct research as such in my view is quite limited but there are some companies which are more than promising in terms of the development end of the R&D spectrum. But even there it is not all sweetness and light. We have had some disappointing experiences there, but increasingly we would try to get into some kind of partnership arrangement where there is a definite product, or a good prospect of a definite product coming out of the end of some activity.

Let me give you a couple of examples. One is the work with what is now British Aerospace Australia on the radar hazard warning receiver for the F111s. DSTO developed the intellectual property and is now working with BAeA on the full scale engineering development. Another example is the work which we are doing with a consortium led by Vision Able in the field of computer security. Again DSTO came up with a good idea and took it some way down the track, after first convincing ourselves that we had a winner. This particular device—it is called Starlight by the way—has potential commercial application as well as defence applications. The idea is that the consortium will develop this, working in partnership with us—it is quite a close relationship—into something that is then marketable.

To reply to your comment comparing industry with our overseas friends and allies, the kind of access that we get to the defence science thinking of our traditional friends and allies is an enormous privilege and nothing would ever really substitute for that. The second factor, which I do want to over-amplify but which is something to be kept in mind, is that our equivalent laboratories overseas, like us, are in the game to support defence. Companies are in the business to make a profit.

Mr SINCLAIR—What about CSIRO and Telstra laboratories, which are two major public sector research institutes? Do you do much coordination with them?

Dr Brabin-Smith—We have a very strong relationship with the Telecom research laboratories. They have been quite forward looking in looking at the developing technologies in switching and bearers—fibres, for example. Telecom has an experimental broadband net based on fibres linking various centres in the south of the country and we work with them very closely. We have a memorandum of understanding with the CSIRO, but this particular bridge does not carry too much traffic. I think it is because the two organisations basically point in different directions.

I do not have the figures at my fingertips but, for example, a year or so ago we exchanged scientists. One of our scientists worked in CSIRO on techniques to detect biological agents and one of their scientists worked with us on techniques to detect and identify low observable landmines. We have a mechanism in place to keep the relationship in good order, but not too much traffic ends up crossing the bridge.

Mr PRICE—You mentioned sponsorship. It is not really sponsorship as we know it, it is merely the Service indicating that that is a good idea rather than providing any financial commitment to it. Is that correct?

Dr Brabin-Smith—It is certainly a sponsorship as I know it.

Mr PRICE—Navy dollars do not go into that 27 per cent, for example.

Dr Brabin-Smith—They do not in the sense that you express it. Given that the

relationship between DSTO and the Services is a very strong one, given that the demand for what we can produce is more than that which we have the capacity to produce, it keeps our customers honest in terms of the need to set priorities. It is several steps short of the kind of playing shopkeepers arrangement that the Brits have in place, but it is pretty effective for all that.

Mr PRICE—Has there been consideration by COSC, for example, of going to the shopkeepers that you were saying? In other words, the core funding that you referred to earlier would go to DSTO but then the three Services, plus headquarters, would actually vote out of their own budgets the research that they are sponsoring.

Dr Brabin-Smith—I will answer that, but let me first make a point on my previous response. It is not unusual for any of our customers to pay for equipment specific to tasks which they want us to do, so we do get an element of top-up from some of our customers already, and that is very valuable.

Mr PRICE—What would that be in one year?

Dr Brabin-Smith—It is sufficient to be useful; I do not knock it back. Last year was a bit of a bonanza year. We got extra funding from the portfolio of about $14 million. We got funding from customers specific to tasks of $7 million, and we got other add-ons of a more administrative nature—for example, paying for redundancies—of some $10 million.

Mr PRICE—We will throw that out. I would not include that in it.

Dr Brabin-Smith—It is not unusual for us to get supplementary funding of one sort or another. Coming to your other question, periodically people ask why we do not have a more specific user-pays environment. Clearly it would not be the end of the world, but so far we have taken the view that the benefits would not be commensurate with the costs. We are talking here about the benefits at the margin compared to the very high degree of responsiveness that we already have. Costs would be in terms of having to have more accountants and, being slightly facetious, the risk of wall-to-wall clerks not really adding too much value to the management of the portfolio.

Very importantly, there is a psychological cost to this. In my view, until we undertook the program of reform, one of the problems with DSTO was insufficient identification with the ADF and the portfolio. We have worked very hard over these last few years to reduce that difference. I am quite firmly of the view that we should take steps to continue to encourage a very close relationship between the scientists and the ADF—not just the ADF, but especially the ADF.

Mr PRICE—Some might argue—and I do not necessarily want a response—that we never get the heads of Service or CDF to actually make the decision between one

more tank and more research. That really goes to the heart of what the chairman is asking about the level of funding. Some would argue that that system may provide you with greater funds than you have now, but I do not want to get into that.

Dr Brabin-Smith—Let me complete my answer. Not only do I believe that we need to work for a close relationship; more importantly, so does the Chief of the Defence Force. His views are quite explicit. He wants to see a far closer relationship, and he believes very strongly that putting in place a more explicit and more detailed user-pays environment will push the relationship in exactly the wrong direction. Those views are shared by the Secretary as well.

Mr PRICE—Forgive me, I am a recalcitrant, but I think there is nothing stronger than a customer relationship. Moving on, the Department of Finance says it is very hard to judge Defence, and if it is hard to judge Defence it is even harder to judge the success of DSTO. Which would be the country that you would feel most comparable to the Australian situation, particularly as far as DSTO is concerned, and where would you place yourself in relation to that country? For example, is Israel a reasonable example, or South Africa?

Dr Brabin-Smith—I am not that familiar with Israel and I am even less familiar with South Africa. I do not know that I can answer the question. I do not spend too much time thinking about that particular question. I think Australia is very much *sui generis*, to be frank.

Mr PRICE—A one-off. Okay. You mentioned self-reliance. In defence terms it is almost like talking about motherhood. We are all doing it, although some might argue that birth rates are not quite as high as you might expect. Into the future, do you see that there is an increasing need for self-reliance? If that is the case, to what extent does that add an additional burden in terms of greater output from DSTO?

Dr Brabin-Smith—That is a complex question. It is obviously not appropriate for me to anticipate what the government's defence review will say, but I think I can say that self-reliance will remain a very important aspect of Australia's approach to its own identity, but that the kinds of judgments which governments made in the 1970s and 1980s on our strategic environment will be less relevant as we look into the 21st century.

There is a greater prospect that the level of intensity at which we might experience combat, and the level of technology used in that combat, will increase. This, to my mind, will put a great premium on key aspects of self-reliance. I come back to an example that I am perhaps obsessed with, namely understanding the strengths and weaknesses of key weapons and sensors. That kind of aspect is going to be increasingly important.

The complication comes when you observe the way technology itself is going. For example, in the future, weapons and sensors will be less hard wired, less hard

programmed, and will be more flexible, so that you will be able to program them almost on the spot for the particular mission which you might be undertaking. That means that the demands in terms of understanding the strengths and weaknesses are going to increase.

There is a complication to this, and this is a bit more speculative on my part. Given the globalisation of defence industry, and given the way that international alliances will possibly develop—and I am thinking in particular of the alliance between Australia and the United States—it could well be the case that we would be involved more in the future than in the past at the research and early development stages of some defence materiel. Frankly, that would call for us to be able to add our contribution to the intellectual property of the pieces of equipment under development. That is somewhat speculative on my part, but you can assume I am speculating with a fair degree of confidence.

Mr PRICE—Some people criticise Defence for being hard wired to proven design, yet doesn't increased self-reliance suggest that Australia at some point needs to graduate to doing design itself?

Dr Brabin-Smith—Where we have key needs, where we cannot sensibly rely on others to have produced something that meets our needs, then that would be the case. The number of examples of that, certainly based on historical experience, is going to be small. Classic examples are the Jindalee radar and, at least in the early days, the kind of towed array being developed for the Collins class submarines.

Our approach to the C3I net has to be uniquely Australian, because obviously we are not talking about a single black box or even a set of black boxes, but we are talking about what in defence terms might be called the ultimate system of systems. Therefore, in that respect we would need to have an ability to analyse carefully our needs for C3I, especially given the expected multiplier effect in future combat, and make sure that those bits that are unique to Australia are being adequately looked after.

Mr PRICE—What I find difficult to accept is that, if you have this pattern of overseas and off-the-shelf and then adapt it for Australian conditions, when you do come to some special needs, you have not got that reservoir of experience on more simpler problems or platforms or aspects on which to call for those unique things. It strikes me that, given the huge progress that we have made, say, in ship building, it is impossible in Australia to design a humble patrol boat and the best option is overseas and off-the-shelf.

Dr Brabin-Smith—I am sympathetic with your position.

Mr PRICE—Thank you.

Dr Brabin-Smith—Let me say, however, that a good example of how we are reacting to that kind of situation is the collaboration we are doing with the Evolved Sea

Sparrow Missile, which will be put on the Anzac ships. We are part of a NATO consortium that is collaborating to increase the capabilities of that missile. That means that we will get insights into the key aspects of this missile—not all of them, but it is certainly better than having no insights in terms of key performance. Examples—and I might not have the details right—are guidance and fusing, as well as some aspects of the propellant and thrust vector control. They could well be good exemplars of the way we will try and focus in the future. I would say that kind of example is probably more relevant to self-reliance than the ability to design and build patrol boats.

Senator SANDY MACDONALD—I would like to ask about your commercial activity and potential for future commercial activity. You mentioned that you were an organisation committed to defence, as were your partners in other countries, and not involved in commercial arrangements or making money. I understand the concept of sponsorship and top-ups. They are self-explanatory. You have success stories. For instance, I understand that the shield tiles that are on the Collins class submarine were your development.

Dr Brabin-Smith—Yes.

Senator SANDY MACDONALD—Is that provided to our allies on a quid pro quo basis, because that sort of technology, in the right hands, could be worth a great deal of money to us?

Dr Brabin-Smith—That is a good example of the complexity of the issue. When Defence decided that we would attempt to reduce the target strength—that is the submarine equivalent of radar cross-section—we went to our friends and allies and asked if they would share with us some of the basic information. The answer was, 'No, it is too sensitive.' We can argue at some length as to whether that was a reasonable response or not. I am not in a position to attack or defend.

However, the net result was, 'The laws of physics tend to be universal; we will design our own,' which we did. That was self-reliance, in that the kinds of waters in which the Collins class will be operating tend to be warmer than those where the US Navy and the RN operate. Therefore, our environment is different. The kinds of sonars against which we felt we needed to protect the Collins class operate in different bands from those that NATO was concerned with.

The other aspect here was the sensitivity of it. Our friends and our allies were not going share it anyway because they regarded it as too sensitive. So we have designed and developed these tiles—and they are on *Farncomb*—and, a little ironically, our friends and allies are now, as it were, stroking their beards and saying, 'I wonder how good those Australian tiles are? Maybe we can share information after all.'

It is also a classic case of where we have focused on something that is central to

self-reliance and which is sensitive, frankly, and which therefore restricts the kinds of markets into which we would sell overseas.

Senator SANDY MACDONALD—Do you have a commercial arm? I understand CSIRO does. I can understand the situation—and I guess you can too—where you could quite inadvertently stumble upon some valuable technology which did not necessarily have only a defence use and that you may have been able to sell. Have you done that? Can you think of a situation where it might occur?

Dr Brabin-Smith—We have a branch within DSTO called Science, Industry and External Relations. I doubt there is a significant defence company in Australia that we do not have some kind of relationship with or contact with. We place work in industry. The figure I have in mind is something like $13 million worth last year, of which—and this figure might not be all that accurate—something like $2.5 million was placed with universities.

Senator SANDY MACDONALD—But this is you paying them, not them paying you?

Dr Brabin-Smith—Yes, and we had revenue last year of about $1 million. So, for example, when I think it was Hawker de Havilland constructed composite flaps for the Lockheed C130J, they asked DSTO to do the fatigue tests on them.

Senator SANDY MACDONALD—Can you see a potential for further commercial development in commercial arrangements in DSTO's work?

Dr Brabin-Smith—In theory yes; but in practice it tends to be quite elusive. What I have been focusing on these last few years is to build up a culture of collaboration with industry so that, within the limits that obviously will apply to DSTO—because we must not compromise our impartiality, we must not be seen to compromise our impartiality, and sometimes that puts constraints on it—I want to get a lot of transparency and trust with industry.

However, the nature of our work often means that the markets are going to be particularly small. To give you a more positive example, with the work I described earlier in terms of computer security, we are going for the highest possible level of assurance of security, here because of the potential class of application within Defence, where you might be taking all source intelligence and wanting to be highly confident that it is not going to leak out in a way which would compromise it. That is why we were doing the research in the first place. But one of the reasons why the consortium got interested in working with us on this was the potential commercial application.

Senator SANDY MACDONALD—Obviously, you have got to be aware of the potential commercial application because it is conceivable that you could find a teflon

process. You might have discovered that and it would be worth a great deal of money to you and, in addition to that, at the height of the Cold War, or even now, the technical value and defence value of those tiles that go on the Collins class submarine might be worth hundreds of millions of dollars in the wrong hands—

Mr LEO McLEAY—Who owns that technology? Do you own it, or do the people who are constructing the submarines own it, or do Kockums own it?

Dr Brabin-Smith—The intellectual property is owned by the Commonwealth. We have licensed it to a company to market. The actual tiles are made by a company which I think is in Melbourne. I think that company has a licence to export, but any export will be subject to export controls. Submarines are difficult enough to find under the best of circumstances. We do not want to make our job, in the defence of Australia, more difficult by having this technology fall into the wrong hands.

Mr LEO McLEAY—I think Senator Macdonald's point is that if you improve on something, do you give that away as a free good or are the people who own the item you have improved upon the ones who make the most benefit and profit out of it? Or do you actually share both in the development cost, which is something you have done, and in the profit of getting something out of that system when it is sold as a better system than what you originally got?

Dr Brabin-Smith—I think it would vary from case to case. Let me emphasise the point that a lot of our work is in the business of scientific advice. That is the focus. We do work which helps Defence make better decisions. That does not always mean—in fact, rarely does it mean—that we develop products which might then be marketed.

As an example—an old one now—take the work that was first started some 20 years ago on composite crack patching. Where we keep old aeroplanes in service for a long time, the question becomes: how do you manage the fatigue so that they are safe to operate? One of the techniques that we have focused on very successfully is patching up cracked or weakened parts of aeroplanes with a composite matrix. That particular technology is very actively marketed overseas by the Brisbane-based company Helitech. We get royalties from that and we have a very strong positive relationship with that particular company.

Mr PRICE—That is boron patching?

Dr Brabin-Smith—Yes. Let me give you another example—

Mr LEO McLEAY—You have not quite answered what I was getting at. There are the simply little things, such as if you improve a laser guidance system. Getting down to the practicalities, you provide pure advice to the Department of Defence, but also you must be involved in making better some of the things that they have bought off the shelf.

Who profits from that? Do we profit by selling those things or selling that technology back to the people who have manufactured the original vehicle or system, or do they just get your advice or your improvement as a free good?

Dr Brabin-Smith—It varies case to case, depending on what the nature of the relationship is. There is a fair bit of trading, as it were, especially with our key friends and allies in the technical cooperation program.

Mr LEO McLEAY—Do you get more out of it or do they get more out of it?

Dr Brabin-Smith—I do not know how much of the world's defence R&D we do in Australia. It is probably less than one per cent. By virtue of this very close and privileged relationship with Canada, the UK and the US, we get access to an enormously greater fount of defence scientific knowledge than we could possibly dream of ourselves. Yes, we get a lot more out of this than we put into it.

Senator SANDY MACDONALD—To follow up on the commercial aspects again, would you consider putting on a top-level technical salesman to look at existing products that have been developed and at those that might be developed in the future? You mentioned the shield that goes on the Collins submarine. It sounds as if this is technology that has passed outside your control. In answer to Mr McLeay, you said it was copyright owned by the Commonwealth; but, given the right circumstances, perhaps not with that technology but with other technology, it may be of very great advantage to the financing of your operation. But, to do that, you are going to have to have somebody or some part of your organisation that is committed to looking at it.

Dr Brabin-Smith—We tried an arrangement a few years ago in which we had a private sector manager on contract to market the skills of DSTO's Melbourne based activities. I cannot say that it was a great success, and we discontinued it. One of the aspects which we had to watch was that the ADF, for whom I work, was very concerned lest scientific effort which might more properly be going to support the ADF was instead being drained away, to various levels of speculation, in trying to make a commercial profit.

Senator SANDY MACDONALD—I agree. I will not follow that up again, except to say that CSIRO has had various commercial developments which they have sold successfully.

Part of the rationale of current and past defence expenditure and planning is based on Australia's technological superiority in terms of our regional commitments and regional neighbours. Do you think that will continue to be true?

Dr Brabin-Smith—It will not continue to be true for the indefinite future; but, in the short-term, I think that we are well placed to continue to exploit advances in science and technology, and to apply them to defence.

CHAIRMAN—Mr Price, we must bring this to a close. We are half an hour over time.

Mr PRICE—Quickly, on notice, could you give us the comparable DSTO spending for other countries, so that we can get some feel for where that 2.3 per cent of the defence budget rests? Secondly, in terms of commercialisation, the defence industry development program has been eliminated. In your opinion, does that make it more difficult to commercialise, or get to product stage, some of the research ideas, or needs of Defence?

Dr Brabin-Smith—The DID program has been the focus of all kinds of reviews for as long as I can remember—reflecting, I think, a belief within the portfolio that it was not as focused as it ought to be. The Defence Efficiency Review recommended not so much that it be cut off but that it be transmogrified into something which would have more focus. I am reasonably optimistic that whatever the new arrangements will be—and I think your question is more appropriately put to whoever will come and give evidence from the Acquisition Organisation—they will be better focused than previously.

Mr PRICE—But there is no new program to date?

Dr Brabin-Smith—As far as I am aware there is every intention to pick up the recommendation in the Efficiency Review—I forget which one it is and I have forgotten the precise words—which would use equivalent moneys in a more focused way. My recollection is that the transformed DID program would be associated in some way with this program of advanced concept or technology demonstrators that the Review gave some emphasis to.

CHAIRMAN—Thank you for your attendance here this morning, Dr Brabin-Smith. You will be sent a copy of the transcript of the evidence for correction in due course.

[12.19 p.m.]

HURST, Mr Jeff, Senior Officer Grade C, Defence Section, Defence, Foreign Affairs and Legal Branch, Department of Finance, Newlands Street, Parkes, Australian Capital Territory 2600

MANN, Mr Evan, Assistant Secretary, Defence, Foreign Affairs and Legal Branch, Department of Finance, Newlands Street, Parkes, Australian Capital Territory 2600

ROMBOUTS, Mr Mike, Senior Officer Grade B, Defence Section Head, Defence, Foreign Affairs and Legal Branch, Department of Finance, Newlands Street, Parkes, Australian Capital Territory 2600

CHAIRMAN—Welcome. I must advise you that the proceedings here today are legal proceedings of the parliament. The sub-committee prefers that all evidence be given in public, but should you at any stage wish to give evidence in private you may ask to do so and the committee will give full consideration to that. We have received your submission and it has been authorised for publication. Are there any additional statements you wish to make to that submission?

Mr Mann—I could perhaps just outline some of the key features of the submission. There is one point of correction I would like to make also.

CHAIRMAN—Good.

Mr Mann—I just note that amongst the responsibilities of my branch is the oversight of the Defence portfolio. My colleagues are from within my branch. Our submission was reasonably brief, so I think I can restrict myself to just picking up some of the key points in that submission. There are three or four things I will raise. One important part of our submission was simply to outline some of the important features of defence budgeting and, in particular, how budgeting in defence is distinguished from other areas of government.

Our submission goes to some of those things like how we budget in a global way at the function level as distinct from other areas of government where, for example, we would budget at program level within the portfolio. Another example might be the discretion available to the Minister for Defence in moving moneys within the global vote. I will not go through the rest of them, but we are quite happy to field questions on those to elaborate or explain any aspect of defence budgeting that you are interested in.

In that section of the paper I just wanted to correct one figure, and I will advise the secretary later of it, but in the first paragraph on page 1 of the submission we give two figures. One is the 1997-98 outlays figure for the defence budget, which is $10.405 billion. That is correct, but the comparable figure for the defence portfolio is in fact

$11.43 billion rather than $11.48 billion.

Mr PRICE—Is anyone resigning over this?

Mr Mann—It was a transcription error so, given that we have come quickly to give you the figure, I am sure you people would understand.

There are a couple of other things that we raise in our submission. I will summarise them briefly. In relation to analysis of defence outlays over time, we have tried to provide some help in interpretation, because when you look at the aggregate figures over time they do hide a few things. In the attachment to our submission we have mentioned the impact on defence outlays of moves over the last decade or so to cost recovery and user charging within the Commonwealth sector. That adds quite significantly to defence outlays over the period. We have also mentioned in that attachment some of the intricacies of superannuation. If you want some clarification on those, I am sure we can help you.

Other factors which should be taken into account when we are examining trends in defence outlays over time would be changes in the level of efficiency or effectiveness in the use of resources in the defence portfolio. There have been some quite some significant changes in the last decade or so which we think point to greater efficiency and effectiveness in the use of resources in Defence which need to be taken into account when considering what capacity a defence outlay provides.

We also make some points about the use, in determining an overall budget for Defence, of ratios such as defence spending over GDP and defence spending over budget outlays. We are not particularly supportive of the use of those ratios in a determining sense. We would say there really is no short cut to deciding an appropriate level of defence expenditure. You have got to look at the overall strategic situation facing Australia—the various threats and contingencies that face the country. We must make assessments on how we approach that risk. There are alternative ways of coping with that. Naturally we think things like affordability must be taken into account, and also the existing level of effectiveness and efficiency of resource use in Defence.

I will close on the point that at the end of our submission we draw attention to the fact that in Defence, like other areas of government in this country—it is not just a problem with Defence—the level of performance information, which gives you a guide on how effectively resources are used, is far from perfect. We have been working with the Department of Defence over the last year or so to review the performance information available from the defence portfolio. My two colleagues here have been working with Defence to produce a performance information review. The review is now completed and is with the Minister for Defence. It is that sort of thing that you need to develop better for the APS generally, but particularly for Defence, to get a better handle on effectiveness in the use of Defence resources. I will stop there and answer any questions.

CHAIRMAN—Thank you very much. You said in one of your opening sentences that Finance had an oversight capability. Can I ask you to expand on that. What is the role of the Department of Finance in the validation of the Defence budget? What input do you have when Defence comes up with a bid of X billion dollars for the next financial year? What is the extent of your oversight and how is it exercised?

Mr Mann—These bids—requests from the minister and the department—are things that cabinet ministers decide and not us, but we provide advice to our minister and hence to cabinet. There are various things that we would bring into play in any advice that we would tender. I have a fairly small group within the branch that specialises in defence and defence estimates. To some extent, we are authorities on the defence estimates, how they are prepared and the various rules that are applied—rules that government has agreed to on the treatment of defence estimates. For example, government has agreed on an overall zero growth rate in real terms for defence over the forward estimates period. We can help government interpret that. If the Minister for Defence wanted to increase that real growth rate, we would give advice to our minister, and that would turn on various things. We would give advice in terms of affordability, and how that pertains to the overall fiscal position of the government. We would have views on the capacity of Defence to fund these things themselves. That is, we would have a view on how effectively resources are used.

I mentioned earlier that a key issue in determining resourcing for Defence is the strategic environment facing Australia. We have no particular expertise in that area. We see our job as ensuring that the right issues are brought to the attention of ministers, and that when the minister or the department makes a request for resources the case is well supported and well documented. We try to ensure that those things are done, and our advice would reflect that.

CHAIRMAN—So it is procedural advice within the context of the whole budget that you are giving to cabinet, almost, rather than validating a need?

Mr Mann—As I said, we are not experts in terms of security and security assessments. Then again, Finance has this problem generally with portfolios. We are not experts. The experts are out in departments, not with us. Within our resources—and we are privy to information that is available to ministers—we certainly try to keep abreast of developments and give advice to our minister. But as I said, in the last resort, on these issues of affordabilty and effectiveness and so on we would rather try and ensure that the right questions are asked, that assertions are substantiated and that ministers, when they are actually making a judgement, have all this information available to them.

CHAIRMAN—You argue quite strongly in part of your report that the size of the defence budget should not be related to the GDP, and the committee would have no quarrel with that proposition; but the corollary of that is that the case has to be established on need, and that when the need is established it has to be funded.

Mr Mann—That is correct.

CHAIRMAN—Thank you.

Mr SINCLAIR—Following from David's question, let me go to superannuation. You mentioned super somewhere in your remarks. I would have thought that the defence force superannuation would have gone to Veterans' Affairs. You say:

Whereas the receipt of contributions and the payments of pensions under the military schemes was previously classified as Defence function, these transactions are now classified to the government superannuation function.

Who looks after government superannuation? Is that your department?

Mr Rombouts—Our department has responsibility for civilian superannuation.

Mr SINCLAIR—But what about the defence force retirement benefits and all the rest of it?

Mr Rombouts—That is for the Minister of Defence.

Mr SINCLAIR—So he looks after DFRDB, DFRB and all those?

Mr Rombouts—And the MSBS.

Mr SINCLAIR—Why does it not go to Veterans' Affairs?

Mr Rombouts—They are not necessarily veterans.

Mr SINCLAIR—Once you have contributed it and it is out of the way—once people have left the services—it seems to be a pension type responsibility.

Mr Mann—I suppose these should be distinguished from disability pensions and the like. These are just part of the normal pay and conditions of service people.

Mr SINCLAIR—But no other department holds these things. If you are a recipient of any other form of superannuation, whether it be as a member of the civil service or the parliament, as I understand it, you become a beneficiary through an agency managed by your own department, do you not?

Mr Hurst—As far as we can tell, it is a historical fact that Defence has looked after their own military superannuation schemes. Perhaps there has been no move afoot to change that to Veterans' Affairs.

Mr SINCLAIR—What is the advantage of them doing so? Is there an advantage? It seems to me to be a bit odd to have Defence running their superannuation—after people become entitled, certainly. Normally, you have a superannuation fund at arms length from the administering authority. I just query that. It seems a bit odd to me that they should be there. Perhaps you could have a look at it and come back. It seems to me that that is something we might have a look at.

Mr Mann—Would the matter not be best put to the Department of Defence?

Mr SINCLAIR—Why is it the Department of Defence? What are the advantages of having it in the Department of Defence? Why isn't superannuation, in its various forms, passed over as it is in every other field of the government sector, either to your department or somebody at arms lengths from the recipient?

Mr LEO McLEAY—And would there be advantages in, say, Veteran's Affairs dealing with it, as they deal with other payments to veterans?

Mr SINCLAIR—We grant that there is an entirely different connotation; but, after all, many of the payments paid in through Veterans' Affairs are regarded as compensation, in a sense, so they are slightly different to the social welfare pensions. Perhaps you can have a look at that.

Mr LEO McLEAY—One might think that might be an advantage to the Defence people, because if they have this big bag of money sitting there as part of their appropriation people would get the impression that all that money might be to do with spending on defence when in fact it is servicing something else. You have said in the attachment to your document, about user charging reforms, that there is about $500 million.

Mr Rombouts—I might just make a couple of points of clarification. My earlier answer was with respect to which ministers have responsibility for the superannuation schemes. Under that, there may be administrative arrangements that cross portfolios. We will clarify that.

There is another point of clarification, just to make sure that we all understand each other. The current superannuation arrangement is that the actual superannuation payments to retirees et cetera are charged to the Defence portfolio, but it is not a Defence function outlay. The Defence function outlay is in fact charged with the accruing liability for current employees. As you may understand from our submission, it is the Defence function outlay which is the control total for defence funding.

Mr PRICE—Perhaps you can clarify it in a further submission.

Mr SINCLAIR—It is $650 million in outlays. That just seems a bit odd to me, so

perhaps we could have another look at that and revisit it—I wondered why it was there. There are two other areas that I have always been a little uncertain of. I think they still call it FMS—foreign military sales—in the US. I know we do not have the same amount of revolving currency in the FMS program with the United States Department of Defence as we used to. Can you identify for me what the amount of money is that we have? We used to pay in each year and there were amounts drawn down which were set on quite a peculiar basis, so that if you had—

Mr PRICE—The purchase of the Chinooks.

Mr SINCLAIR—For example, with the FFGs, at times we were paying about a billion dollars a year into the fund. They were only drawing down a certain amount and we had a credit at any one time of significant sums of money in that fund. I do not know what the present state of play is. Do you? Could you tell me what it is and what the present operation is?

Mr Rombouts—Certainly not offhand. I am not sure whether it is something that our department would know, under the current arrangements; it might be a question for the Department of Defence.

Mr SINCLAIR—If you cannot tell us, if you advise us of that we can have a look at that.

Mr Rombouts—Certainly.

Mr Hurst—There is no fund held by the public account as such. It is in Defence's books what they pay for the foreign military sales.

Mr PRICE—Are you happy with that arrangement?

Mr Hurst—It is just part of the global nature of the way Defence operates. They get their funds; we do not look at those sort of details.

Mr SINCLAIR—I know they get their funds, but what happens is that they have always had a flexibility in how much is paid in and how much is drawn out each year. I have not seen recent figures—

CHAIRMAN—The Denver bank account.

Mr SINCLAIR—It is the Denver bank account—that is right. It is a very handy little pot of gold at the end of the tunnel. I just wanted to know what was in it, how much we are drawing down and how much we are contributing at this time. If you cannot tell us, we will come back to that.

The other thing on which I am not too sure how we are operating—and, again, I have not caught up with its fine points—is a thing we used to have called an implicit price deflator, which Jim Killen and I had a great deal of difficulty understanding. It was the formula around which, each year, the nominal amount of money allocated to Defence and the real amount of money allocated to Defence seemed to be entirely different. Do we still operate on that economist's dream?

Mr Mann—I will ask Jeff to answer—he is my expert on that.

Mr Hurst—The Defence budget is adjusted each year for inflation movements. There is a range of different inflation measures that apply to individual components of the Defence budget. We have a range of factors, such as the CPI, non-farm GDP and particular Public Service types of cost increases. They all then adjust their individual components which are amalgamated to form one Defence budget total. Given that that total therefore arises from a collection of factors, you could imagine one composite factor. We do not use a composite factor, but it tends to end up as such.

Mr SINCLAIR—But it was always on a different period. That was the other thing. It used to be annual—I think it was 1 January to 31 December, whereas everything else was 1 July to 30 June.

Mr Hurst—Since 1992-93, Defence budget price adjustment is comparable to other agencies in that we use financial year-on-year price adjustment.

Mr SINCLAIR—Thank you.

Mr PRICE—Do you have a paper on those different deflators or inflators?

CHAIRMAN—Can you supply a paper or note on that?

Mr Mann—Yes, we can provide it.

Mr PRICE—Given the responses to the chairman's question, it sounds as though expenditure review for Defence is merely a rubber stamping by Finance. Do I have an accurate feel for the process?

Mr Mann—No, you do not, not at all. Expenditure review processes for Defence are like those for any other portfolio. The government has decided that, for the forward estimate period, we are using a zero growth assumption, but that is just the policy position of the government at the moment. We have no particular additional role in Defence in terms of our influence over the numbers and what we do in other portfolios. Our role is to advise our minister and ERC. It is ministers who make the ultimate decision on the level of Defence funding.

Mr PRICE—Without divulging the inner workings of expenditure review—and I know you are not permitted to do so—would you be able to give the committee an idea of the range of proposals you put up for reducing expenditure or making savings within the portfolio, other than those initiated by Defence?

Mr Mann—It is a bit difficult for me.

Mr PRICE—Without getting yourself into hot water, can you tell us the extent?

Mr Mann—I could pretty rapidly get myself into hot water here about the sort of advice we give to ministers. I think I should just say that, like any other portfolio, where asked to we give up options for providing savings. Defence is no different.

Mr PRICE—Okay. Is that knowledge that you acquire to make such proposals merely a function of the relationship and knowledge between yourselves and Defence in studying the defence entrails? Or do you look at other countries and see the trends there and what savings may be made?

Mr Mann—This would apply to other areas of the department as well as ours. We clearly have rather limited resources in terms of what independent research we can conduct and much of the intelligence we gather—and I use that in a lower case sense—

Mr PRICE—It is probably not a good expression for this committee.

Mr Mann—That is right. It does come from our dealings with Defence, both from the submissions that are submitted and our own discussions and membership of various committees in Defence. We have other sources of advice with a variety of sources. But we are—

Mr PRICE—Are they all internal to Australia?

Mr Mann—Yes.

Mr PRICE—For example, would you be unaware of the trends in your counterpart organisations in the United States and the UK?

Mr Mann—Not at all. For example, there is certainly OECD data on trends in aspects of budgets in all OECD countries. Those things are available quite freely. We all have access to those.

Mr PRICE—The trends. But I meant that clearly other organisations are attacking a particular area. Trends are macro or aggregate things. I am not talking about that so much as looking to take the benefit of other's experience. Since we, in Defence, adapt and modify every other thing, why would you not be hooked into the same process for our

powerful allies and friends?

Mr Mann—We are courtesy of Defence. It is our participation with Defence in examining not just numbers but also proposals for particular projects. I have to say that we are rather limited in what we can do. I have a section of six or seven people who look at Defence and a lot of their work is involved in estimates. We must be very selective about what we do and we clearly are fairly reliant on what is available within government in Australia.

Mr PRICE—Given the unusual way Defence is budgeted, different from any other department, why do we need a finance section?

Mr Mann—A good question: we thought that much ourselves. There are several answers to that. It is fairly small when you consider that this is a defence budget of over $10 billion and we have only one section on it. So it is, proportionately speaking, a fairly small resource allocation within the department. Just the oversight of Defence estimates does require some people. It is not an entirely straightforward matter of budgeting for Defence, and we have already mentioned specific indexes. There are ways in which we build up the estimate from previous years. We have to agree a base. There are particular rules about carryover money from one year to another and so on. That requires a number of people to do that and to ensure that ministers are confident with the estimates. We are dealing with $10 billion and we have to be pretty sure that we are right.

That same group of people also get involved with the department on particular large proposals for expenditure so we have to have competent people who can discuss things with our colleagues in Defence. Our time is cut out for us—even though, in some ways, our task is simpler than what it might be for some of my colleagues who have to negotiate with departments over program budgets from year to year, who do not have the whole thing moving through a combination of indexes. We have it easier in that regard, I agree, but that is reflected in the resourcing that I have available to me.

Mr PRICE—Defence operates under a program management technique of finances; is that correct?

Mr Rombouts—They follow program management budgeting, yes.

Mr PRICE—Given the way the Public Service is moving towards more devolution, more accountability, are you convinced that the program management approach is the best way for Defence to be operating?

Mr Rombouts—That is a difficult question.

Mr PRICE—If we took the officer in charge at Holsworthy, he would be getting a stream of money from all different programs to run his operation yet he could probably

effect more savings if he had one budget and even shared in some of the savings. The opportunities to run more effectively and efficiently are, I think, somewhat minimised whilst you do not have that officer totally responsible for everything. Even the simplest thing—say, electricity—would not come out of his budget. I think it comes out of ANL. But if I am wrong on electricity, I am right on some of the other issues.

Mr Rombouts—Some of the comments you are making are about the way in which Defence has implemented program budgeting and that is a very wide field. Our corporate position is that we are always sceptical about the status quo, if you like, on anything and we are always looking for ways to improve it.

Mr PRICE—Have you raised that with Defence at all?

Mr Rombouts—Yes, we raise it with Defence and Defence themselves raise it. There is quite a lively debate—

Mr PRICE—So you are saying that they reject a lot of their own ideas?

Mr Rombouts—There is quite a debate in the department.

Mr PRICE—I want to get a better understanding of the special budgetary arrangements applying to Defence. Let us take the Holsworthy example again. Hypothetically, if Defence were not able to use Holsworthy—it being one of the airport sites—and they relocated part of their units, would they be automatically reimbursed under the current budgeting arrangements? Would their budget be automatically supplemented for moving?

Mr Rombouts—No.

Mr PRICE—Clearly, if Defence has to relocate, unless there was some other vacant bit of land, would they be automatically supplemented for purchasing new land?

Mr Rombouts—No. They would always be free to ask for supplementation. But if the key word is automatic, the answer is no.

Mr PRICE—It is absolutely not automatic.

Mr Rombouts—No.

Mr PRICE—So if you were bloody-minded—I appreciate again that this is a hypothetical question—you could significantly squeeze the Defence department's vote by forcing them to relocate out of Holsworthy but not granting supplementation to the vote.

Mr Rombouts—That would not be ours to decide anyway.

Mr PRICE—No, that is right. I am trying to understand the processes on the impact.

Mr Rombouts—The government could decide that way, yes.

CHAIRMAN—In conclusion, I have a question about the proficiency review. How much longer will that be maintained on the Department of Defence? Do you see that going for another three years or another five years?

Mr Mann—Is this the defence efficiency review?

CHAIRMAN—The annual two per cent cut for alleged efficiency savings or proficiency or whatever you want to call it.

Mr Mann—There are no deductions applying to Defence at the moment.

CHAIRMAN—But you are still demanding some proof of efficiency gains, are you not?

Mr Mann—No, we fund defence globally. There is no efficiency dividend, as there is with other departments, applying to Defence.

Mr Hurst—Defence is obliged to report to ministers on achievement of some efficiencies, especially flowing from the defence reform program. But there are no cuts to funding.

CHAIRMAN—Just one final question: what is the department's view of expected outcomes from the performance information review?

Mr Rombouts—At this stage, we are expecting, I suppose, two streams. The first relates to the Department of Defence re-examining how it uses evaluation and performance information in its decision making process—that is, putting the activity into gear and using it for management. The second relates to the external dimension—that is that it will bring increased accountability, increased transparency and exactly what the public is getting for its money.

CHAIRMAN—Thank you for your attendance here this morning. We will send you a copy of the transcript of your evidence for grammatical correction.

Luncheon adjournment

[1.45 p.m.]

ADAMS, Commodore Harold John Parker, AM, National Defence Committee Member, Returned and Services League of Australia, GPO Box 303, Canberra, Australian Capital Territory 2601

CUMMINS, Commodore Adrian Ronald, National Defence Committee Member, Returned and Services League of Australia, GPO Box 303, Canberra, Australian Capital Territory 2601

CHAIRMAN—Welcome. We have received a submission from you which has been authorised and published. I must advise you that the proceedings here today are legal proceedings of the parliament and warrant the same respect as proceedings in the respective houses of parliament demand. Although the subcommittee does not require you to give evidence on oath, you should be aware that this does not alter the importance of the occasion. The deliberate misleading of the subcommittee may be regarded as a contempt of the parliament.

The subcommittee prefers that all evidence is given in public but should you at any stage wish to give any evidence in private you may ask to do so and the subcommittee will give consideration to your request. Would you like to make any additions or corrections to the submission that you supplied? I understand you wish to make an additional statement to it.

Cdre Adams—We would like to lead with an additional submission.

CHAIRMAN—Do you wish to table that or do you wish to read it?

Cdre Adams—We would be happy to table the additional submission.

CHAIRMAN—It is agreed that the additional submission be received and tabled. I now invite you to make a short opening statement before we move into question time.

Cdre Adams—I would like to thank the committee for inviting the RSL to give evidence to this important inquiry. I would like to apologise for our chairman, Major General Adrian Clunies-Ross who regrettably is unavailable to appear.

Firstly, I would like to thank the committee for inviting the RSL to give evidence to this important inquiry. I would like to apologise for our chairman, Major General Adrian Clunies-Ross, who regrettably is unavailable to appear. Since making our submission to the committee in April 1997 a second budget has been brought down by the Howard administration which has begun to turn around the direction of defence funding. For instance, in the 1997-98 budget outlays, as a percentage of government outlays, defence rose from 7.8 per cent to 8.2 per cent. As a percentage of gross national product

the figure is put at 1.9 per cent now, which is up from 1.7 per cent the previous year.

It remains, however, the RSL's long held view that the percentage of government outlays allocated to the defence portfolio should be between 10 per cent and 12 per cent, or around 2.4 per cent of GNP. In our paper the RSL expresses the view that for any government the first responsibility must be the security of the nation and its people. At the same time one has to recognise that the creation of a sound budgetary situation is a vital and important element of a viable defence outlook.

As an aside, it is interesting to point out that Japan—which spends one per cent of its gross national product because it has such a strong economy—is able to afford very up-to-date and extensive naval, army and air forces which reinforces that aspect of a sound budgetary situation which any government should aspire to.

Thus, the defence efficiency review and the defence reform program are important fiscal measures aimed at making the defence dollar go further and being more effective, and which build on the resource and fiscal reforms introduced by the Beazley and Ray defence administrations in the last decade.

That said, it is a fact that the defence reform program will not deliver the savings necessary to enable even a modest investment in new and essential equipment programs for the ADF. Some additional $400 million alone is needed to ensure that levels of operational proficiency in the Australian Defence Force are raised to acceptable levels and these will not be realised for at least 2½ years. A steady rise in defence expenditure is therefore necessary in order to implement even a modest re-equipment program.

We believe such a program is essential if the ADF's expanded role of creative engagement with countries in our region of primary strategic interest is to be achieved with confidence. This expanded role, which the RSL supports and which aims at building trust and confidence between nations, is argument alone for an increased priority for defence expenditure, as explained in our earlier paper.

One further point we would wish to make is the requirement to address the rate of change of technology and the need to ensure that our very small forces are equipped so that they can fight above their weight. The focus on re-equipment must therefore be on weapons, sensor and control systems and force multiplying command control communications and intelligence systems so that our war fighting capabilities are maximised.

Platforms are important, but it is the weapons systems and the ability to deploy and bring them to action in circumstances that we can dictate which will decide the day. This philosophy requires an intellectually technological process which can provide the ADF with self-improving systems involving a wide range of in-country development and support systems. This includes a comprehensive understanding of the emerging revolution

in military affairs. The RSL is strongly supportive of what has been achieved in this area in the past 15 years, particularly in the marine defence industry, and we would like to have seen a similar increase in national military aerospace capability.

Against this philosophy, our paper points out those areas where re-equipment programs need to be implemented with some urgency in order to give the ADF the necessary fire power and war fighting capabilities. We instance things such as army mobility and battle firepower, RAAF, airborne early warning and navy's improved war fighting capability across the range of surface anti-air and anti-submarine capabilities.

Finally, we would like to make the point—and I believe it needs to be understood in the wider community—that funds spent on defence are not funds down the drain. It is our understanding that some 84 per cent of the Defence budget is now spent in Australia. Also, significant money is returned to the government through taxes—income tax and fringe benefit tax; there is the technological spin-off into private industry that occurs through involvement in defence programs; and some thousands of well-trained, educated people leave the services each year to rejoin the civilian work force. Thank you, Mr Chairman, and could I ask for the paper to be tabled?

CHAIRMAN—Yes. Thank you.

Mr SINCLAIR—Do you wish to say anything at this stage, Commodore Cummins?

Cdre Cummins—Not at this stage.

Mr SINCLAIR—This is one of the things that is obviously difficult at this stage for the RSL, but have you been involved at all in discussions regarding the DRP and the restructuring that it entails? Do you have any observations you might wish to make about the realism of the savings that are expected to be gained from it?

Cdre Adams—We have not been intimately involved in it, although a number of us have attended briefings on it; but we have not made any contribution to the Defence efficiency review or the Defence reform program as such. We do not particularly have much to criticise that program for, although we believe it is having an impact on people at the middle level of management who may not understand what the outcomes may be. I think it may impact on career patterns for middle-ranking officers who may well be looking at greener pastures if the rationalisation process occurs to the detriment of career management.

Mr SINCLAIR—I suspect the same applies with this, but I would be interested in your views although I know both of you are from the navy. An aspect of change relates to the army 21 program and with it the role that is going to be accorded the reserves. Has the RSL Defence Committee—which is the particularly hat you are wearing at the

moment—seen and observed that army 21 program, and have you views on it and the extent to which the reserves are going to be capable of fulfilling the role expected of them, their higher measure of readiness, and so on?

Cdre Adams—We have a member of the reserve on the committee, though he does not appear at every meeting we have. There has been criticism within our committee of the army 21 program, but it is now being implemented and I guess our situation is that we virtually watch and wait and see how it is implemented.

Mr SINCLAIR—One of the reasons I am asking the question is that if you are looking at Defence funding, you have to look at what they are going to be funding for. Part of the reason for my question was that there have been various ideas put to us about priorities in defence expenditure. Some of them have emerged from the Defence reform program, some from Army 21. Some witnesses have given us a suggestion that perhaps we ought to reverse the order of priority and put a lot more money into research and development, and then into capital equipment, and have general standards of readiness dropped because they can be upgraded if you have the equipment and if you have the research to keep you at the technological edge. Has the RSL looked at this aspect at all? In other words, are you essentially giving your comments in relation to the Defence budget as it is, rather than in relation to some of the changes and proposals.

Cdre Adams—Basically in relation to the Defence budget, but without specifically homing in on what is happening in the Australian Army.

Senator SANDY MACDONALD—In both your submissions you arbitrarily picked the figure of 10 per cent of budget outlays. What is the basis of that figure?

Cdre Cummins—When you look at what the capital program is for defence and how much is stacked up that cannot get into the program at the present time—there are required equipments that take a lead of force into the area of the technology required and the region required, and service a smaller force that will require higher technology to support them and give them a punch that is overweight—you will find that the figure comes out at around 10 per cent.

This has to draw down from the strategic circumstances in which Australia finds itself—and I am aware that there is a strategic review. It would be surprising if a strategic review at the present time, in our circumstances, did not lead to a program that needed more capital expenditure for the future. Certainly more would be needed for the personnel, because where you have a smaller number of people with more skills across-the-board, you would probably have to pay them more to keep them. You would probably have to pay more to get them. It will certainly cost more to train them and then to keep them effective.

The percentage figures are, of course, shorthand for much deeper studies that you

need to do to find out what the balance of that budget ought to be. Other factors that come in there are what you need to spend in Australia to support these equipments, to make sure that they can be modified, repaired and upgraded, and what is the basis for their replacement by Australian industry. Certainly the development of Australian defence industry policy is well under way in the minister's offices at the present time. That will also involve the need to be able to sell and support equipment in our region because, within the Australian Defence Force, there is not normally sufficient to maintain those industries just in supplying and supporting the Australian Defence Force.

Senator SANDY MACDONALD—You mentioned technological standards of the ADF. In connection with the region, at this stage we have some technological advantages. We spend a great deal more on defence than do almost all our neighbours. We spend more than Singapore does and nearly twice as much as Indonesia does. How long do you think the technological advantages that we have now will maintain our position without more expenditure in real terms on defence?

Cdre Cummins—That is a very key point, and I think you have hit the centre part of this. At the present time Australia has a technology advantage over its neighbours in the region. That technology advantage comes from the alliances we have, particularly across the Pacific with the United States. That technology advantage is starting to shrink now as countries in our region and slightly beyond are able to spend more on first-grade modern equipment, and have a better ability to use them. That is an advantage because it is our allies' capability working with us in bilateral and joint work, but it also means, of course, that there is the potential problem of maintaining our position of superiority where we have much smaller forces.

CHAIRMAN—Would you accept the proposition that we are already behind?

Cdre Cummins—I do not accept the proposition that we are already behind, because in the areas of command, control, communications, computers, intelligence, surveillance and reconnaissance—C4ISR—we have a substantial advantage in certain areas at the present time. These are the key areas for the future.

It will be necessary to redress any slippage in our technology advantage—there is potential for the future—and then to increase it in key areas of C4ISR. I suggest this is where the shift in the procurement programs will be required to meet the new strategic studies that are completed and a revised defence strategy. It is in these areas that Australia must maintain a very substantial advantage in order to maintain the security for our people in the future. It will require investment in these IT areas for the defence force.

With a substantially smaller force in a region where people are becoming much more able to buy modern equipment, for our ability to get inside the reaction and thinking times and to maintain a full range of surveillance to know what is going on for certain, we will have to make substantial new investments in equipment, support, training and

operations to get our joint and combined operational skills and also be able to maintain the ability to operate with allies as they move ahead in these areas for the same sorts of reasons.

This challenge for the future is a key one which I suggest is worrying the defence planners at the moment. Some say we will not be able to afford to keep up. Making sure that we do keep up and are careful and selective in the sorts of equipment that we get and the techniques that we develop and the training that we carry out is a vital part of the ability of this country to maintain security in the future. This comes into the area of reconnaissance and surveillance, our intelligence activities, the areas of AEW and C, of strategic UAVs—unmanned aerial vehicles—a number of which are now developing. A number are in use and are crucial, for example, in Bosnia where, without those technologies, the intelligence of what is going on would not be available to SFOR. We have to be in a position where we do know what is going on so that diplomatic action can be taken to balance it out in the future.

Initial expenditures in these areas need not be vast, but have to be selective and very carefully placed. Our industry has to be developed so that we are able to adapt, use them totally effectively, maintain and update to meet our specific geographical climate and distance factors. These are the challenges that are there. With the present budget, the defence reform program aims at having 7.7 per cent more effective use of the dollar. That is a very worthy goal that will come on over the next few years.

There is another area of procurement reform that should get some more percentage. I think it is a very good program of the minister. Advantage is taken of those internal efficiencies. When they come on, you get something of the order of a billion—or a billion and a half—which effectively takes the current $10 billion up to about $11.5 billion. When you look at the amount of capital and the training levels that are required, the modernisation of equipment and the level of operations to maintain that effectiveness will probably require a couple of billion more on top of that. That comes back fairly close to the 10 per cent figure that is mentioned in the submissions of both the Returned and Services League and the Navy League of Australia.

Mr LEO McLEAY—I was interested in your proposal that we should acquire more intelligence gathering equipment. What would your reaction then be to the recent unpleasantness in Papua New Guinea? The Prime Minister of Papua New Guinea was of the belief that everything that they did and said would be known by us; and if there is any country in the world where we should have some understanding of what is happening, it is there. Indeed, it turned out in the end that somewhere or other we did know and hear everything that they were saying, but it never got to the policy makers. There is no point having the most reliable snooping equipment in the world if the information does not end up on the desk of the person who has got to make the decision.

Cdre Adams—Absolutely correct. It is really a question of process. It is essential

that the derived information from all sources is presented to the command or to the political masters so that they are aware of the full situation. It is a question of process and ensuring that people have that and understand how to use it. You may have particular knowledge of an event through some specialised intelligence gathering apparatus, but you may not wish to reveal that you are actually using that, so you have to be very circumspect in the way in which that information might be used. That is a judgemental factor that has to be understood, and the judgment made by those who have the supreme authority in these matters.

Mr LEO McLEAY—In a limited budgetary scheme, what do you need: more hardware or more people?

Cdre Cummins—I will take that up and link it to the point I made about the levels of training and the levels of practice. You are dealing with these particular systems, the assets that feed to them and the ability to bring data together and to synthesise it and present it for decision. It is a process that you have to continually practise and continually use; and you have to cooperate continually with neighbours and friends and allies. It is not something you can turn on and off when an emergency occurs. But even if the best information is actually available, there comes the point where decision makers, when presented with it, have to know what it means and then make decisions about it. That is not a military matter. That becomes a political matter for the government of the day to decide what they want to do about the information that is properly provided to them.

Mr LEO McLEAY—But aren't the military the people who initially process this stuff? The material from Papua New Guinea had been captured, but it had not been processed.

Cdre Cummins—Obviously I cannot make any comment on any specific events or any current operations. That is not a role that the RSL or the Navy League are involved in at any level. I can say, however, that the ability to properly collect, assess, process and evaluate is an ongoing one requiring a lot of people and a lot of practice. It requires the investment in command centres and the support equipments that go with them, so that information that is collected in the field can be put together with all of the information that relates, properly processed in a timely way, and presented. The ability to select against the sets of rules of priority must be built into that equipment and used so that decision makers get their information on time, presented and filtered correctly, or presented in the raw correctly; then the follow-up can occur. Those sorts of command centres, backed by those equipments and systems which fall within the command, control, communications, intelligence, surveillance and reconnaissance area are not yet full developed within the Australian sphere. They are areas which will require substantial investment in the future. Of course, it applies to levels of equipment right the way down to the soldier in this vehicle, wherever he is. He will need to have this information and be able to use it, and he will need to be able to collect and transmit. There will be circumstances in the future where the man in the tank, the man in the truck, the man in

the fighting vehicle, will have on his screen the same data as the commander at headquarters—the same data that is available to a political decision maker.

Mr LEO McLEAY—That would not be very clever if someone captured a tank, though, would it?

Cdre Cummins—Of course, you build in the security systems that go with these things, as I am sure that members of the committee are aware. It is no different in technology to what is now beginning to be fitted in advanced motor cars to be able to show you your way around a city: a screen to follow and an automatic voice that tells you where to go. These technologies are much the same, but they require substantial R&D, substantial investment, and then updating and awful lot of practice to use.

Mr LEO McLEAY—Maybe when they have got women doing it, it might mean they will do it quicker. I only saw men doing these jobs, and I think the government has women in these trucks nowadays.

Cmdr Adams—Senator Macdonald talked earlier on about closing the gap. I think one area that should be addressed is the question of education. Our neighbours to the north now have highly educated people running their organisations. The gap in education is closing. As part of the program we have to invest in education for our people so that they can think inside the square and rise to the intellectually challenging technical problems that the Australian Defence Force will be faced with in the future. There is a great challenge in this area of the training and education of our people. If we are going to fight above our weight, we have to have people driving it who can rise to that intellectual challenge and feel confident that they can do it. It is a very important area that needs to be addressed.

Cdre Cummins—Another area that follows on from that is that with a smaller defence force, down to around 50,000 people, for the first time we have to draw on the national infrastructure to a very large extent indeed for day-to-day defence force operations—in peace, for practices, in times of emergency and in time of conflict. That means that out there in the community many more enterprises are involved in the day-to-day business of defence. This is because it is more effective to do so and because these services are now available for the first time throughout the country, particularly in the north and the north-west. This emphasises the investment we will have to make in the key strategic industries that support that, and in making sure that they are kept in step as well.

Industry policy and the priorities of the government to support defence are now much more important. We need to make sure that stockholdings, the repair and upgrade capabilities specifically in the areas of software development and security, and the ability to prevent others interfering in those systems, will be a key part of defence policy. We have not seen this kind of balance since the beginning days of the Second World War, when industries had to be developed specifically to support Australia in that war because

of our geographical position.

These particular processes of development also provide us with substantial export opportunities and substantial opportunities in new technologies for our industries. I think this is an important part.

As the committee will well know, the main navy programs that started from about 1984—helicopters, submarines, Anzac ship, mine warfare and command and control—have created a very large number of new high-technology jobs in this country and supported many hundreds of different firms. Those infrastructure developments are vital to the future defence of the country and are particularly important for the army and the air force as they develop as well. We will need to carefully nurture those skills, particularly in the business of software development and systems integration, if we are to maintain and grow the technology edge on which our success will depend. How these things occur is an integrated process.

Senator SANDY MACDONALD—Under the DRP, you will have a greater emphasis on the use of the reserves. If you have a reduced number of regular ADF, will the savings be used on the upgrading of equipment and maintaining the technological edge? With a greater reliance on the reserves, will there be a considerable upgrading of the amount of time for training, entry, initial recruit training and things like that? What is your opinion on that proposal?

Cdre Cummins—The reserves and their position have always been a matter of great discussion. I think it is inevitable in the future that there will be fewer of them and there will be an opportunity to have them more sharply trained and focussed. This, in itself, will require a greater investment but I think the days where you have reserve divisions of the army and large numbers of people in the reserve who are able to fly combat aircraft are not there any more. The smaller ADF itself will have to be substantially more effective in terms of punch per man, if you like.

Senator SANDY MACDONALD—That is not what was proposed under the DRP. It seems to me there is a greater reliance on reserves than ever before. About half the ADF will be reserves and half the ADF will be regulars. You talked about interaction with the community before in terms of the whole gamut of education, linking in with industry and industry policy and employer support. If you are going to get those sorts of things it is going to be increasingly important to have a reserve force that is part of the technological edge.

Cdre Cummins—I think the reserve forces will have to be smaller for just the reasons that you have said. I think they have to be more readily available and there has to be a larger amount of investment in their training. There are always difficulties, of course, of availability from key industries. It was not envisaged in my answer that where we were talking about a larger dependence on the national infrastructures to support defence; that is

the national infrastructures of transport, industry, technology areas and telecommunications. I was not indicating there that that was a reserve role. The reserve role would be to provide an expansion base and to provide alternative people to take up different roles that are required when there is a national emergency. I think the structure of that will change quite dramatically in the future.

I think as the Defence Reform Program goes ahead that we will see some changes evolve where the reserves fit in. Certainly the reserves have not been able to be funded, trained and supported with modern equipment to the level that the chiefs of staff would have required. I think the balance has to change. When talking about modern warfare for Australia, we are not now talking about numbers of people. We are never going to be in the numbers of people business. We have to have the ability to hit, the ability to use fewer weapons dramatically more effectively, the ability to target and hit and to have many fewer people carrying out those roles—hence the statement I made about the levels of training and pay needed in the future to attract and retain such people.

These are the developments that will occur. I do not think that, as a country, we will ever be in the business—with a base of 18 million growing perhaps to 22 million people in the period we are talking about—of having many divisions of troups. We will have to operate our equipment more effectively with fewer people. This, of course, is not a trend that we face alone. This is what is happening in Europe and the United States as well.

Senator SANDY MACDONALD—I have one final question for you, Commodore Adams. You may not be able to answer it. Have you had the opportunity to discuss with your fraternal organisation in New Zealand the deplorable state of their expenditure? What do they feel about it?

Cdre Adams—Regrettably, I have not. I do have some very good contacts in New Zealand, having spent two years there, but at the present time I am not in touch with the situation in New Zealand. They have always had a tough time there.

Senator SANDY MACDONALD—They are having a particularly tough time now.

Cdre Adams—Yes, so I read in the papers.

CHAIRMAN—I just want to get in a couple of quick questions. It is a mistake to give the committee a lead before I get in. I would like to have a few minutes on the Navy League before we put you through the door. You mentioned something about a 7.7 per cent efficiency gain coming, Commodore Cummins. That is news to me. Where is that coming from?

Cdre Cummins—If I recall, they can see an increase in the effective use of the defence dollar by about that percentage.

CHAIRMAN—Is that after all the annual efficiencies and things we have?

Cdre Cummins—I think this is on top of that. This comes from the reduction in the number of people, the reduction in the number of establishments on the ground and the more effective use of Defence personnel.

CHAIRMAN—That has answered my question. As the representatives of the Returned Services League, I want you to look at the present budget picture, where 30 per cent of the annual vote goes in new capital equipment. Does the RSL feel that that is a fair and just breakdown with regard to all the other things that you want to do with the Defence Force, and do you think it is sustainable in the future? We have been given evidence that 30 per cent ought to be the norm. I would be interested in your view on that.

Cdre Cummins—I think that 30 per cent is short of what it ought to be. Defence finds itself paying too much in terms of how many people it has. The defence efficiency review and the defence reform program certainly lead to a lowering of the salary bill, doing more with fewer people more effectively and, where it can be done at a more efficient rate, putting more out to industry. I would like—as would the RSL and the Navy League, I think—to see the percentage put into new capital move up but without prejudice to the level of operations where there are currently problems of getting sufficient practice and operational time to maintain levels of effectiveness in the ADF.

This, of course, indicates that you really need to raise the budget levels so that you can continue meet all of those requirements effectively even with fewer people.

CHAIRMAN—Looking ahead, you talked about the rate of change of technology, weapons, sensors, control systems and C3I. You put platforms last. Do you see platforms now as largely irrelevant?

Cdre Cummins—I hope I did not put platforms last, as such. You certainly have to have sufficient platforms of all types—ships, submarines, aircraft and army mobility. But those platforms have to be effectively equipped with C4ISR and effectively used by people who are practised and trained. With the area in our region that Australia has to look after—over 10 per cent of the globe's surface—we need a minimum number of platforms to perform the job and we need to have platforms in place doing it on a continuous basis, right now. I think the platform numbers need to go up. The platform numbers at the present time, particularly for the navy, are an absolute bare minimum. There are some replacements due in the future and substantial numbers of upgrades. These particular areas include the destroyer force, the submarine force—

CHAIRMAN—With respect, I would like to take that under the Navy League submission because we are running close to half an hour late. I thank you for your attendance as representatives of the RSL and, under the same terms and conditions, invite

you to address the committee as the Navy League of Australia.

[2.28 p.m.]

ADAMS, Commodore AM Harold John Parker, Vice-President, Navy League of Australia, PO Box 309, Mount Waverley, Victoria 3149

CUMMINS, Commodore Adrian Ronald, Committee Member, Navy League of Australia, PO Box 309, Mount Waverley, Victoria 3149

Cdre Adams—Again, we would like to make a supplementary submission which would supplement our earlier submission of April. Firstly, I thank the committee for providing the opportunity for the Navy League to meet with members of the committee. At the same time, I would like to apologise for the inability of our federal president, Mr Graham Harris, and our senior vice-president, Andrew Robertson, to be here today. The former is overseas, and the admiral is unavailable and both have asked me to apologise on their behalf.

CHAIRMAN—Thank you.

Cdre Adams—Like most organisations concerned with defence issues, we welcome the change and direction of defence funding in the most recent budget. Defence outlays have risen from 7.7 per cent to 8.2 per cent of total government outlays. With the budget now moving towards a balance, the Navy League would expect this trend to continue and we would welcome any commitment on the part of government for an assurance which would guarantee the continuance of that trend.

There are two aspects of the Navy League submission which we believe are worthy of examination by this committee: firstly, defence planning in a no-threat environment and, secondly, measures to ensure the continuing development of a viable maritime defence industry.

Our submission discussed the present strategic outlook, which is characterised as uncertain—indeed, there is a level of uncertainty, not widely appreciated, and certainly more complex, subtle and unpredictable than has been seen for generations. It is against this background that the Navy League believes that balanced naval forces, with incisive war fighting capabilities, hold the key to Australia's ability to respond rapidly to any deteriorating situation that may arise in our region of strategic interest.

By their nature, naval forces are flexible and sustainable and can deploy at short notice, as evidenced in the Gulf War, where a task force was under way within 72 hours, and as far back as the Korean War. Naval forces do not require the involvement of a third party's territory or air space and operate essentially on the high seas. They are particularly useful in situations short of conflict. Their presence can control an escalating situation and, generally, they provide government with more diplomatic options.

On the other hand, a nation wishing to gain diplomatic concessions from Australia could in some way threaten our resources of, what I have styled, the Australian ocean territory or that interest within the economic exclusive zone. They can do that without having to set foot on Australian soil, with all the international odium that that would bring. Such intrusions, and such credible maritime contingencies, can only be controlled by naval forces and that, in itself, could be a major undertaking, given the extent of our Australian ocean territory.

In relation to naval forces, in this context, we have used and involved maritime air support in all its forms, together with the support of a national controlled intelligence and surveillance requirements system, which we have referred to in earlier submissions. Finally, naval forces equipped with precision guided littoral warfare weapons—that is, Harpoon, extended range ordnance, and, ultimately, Tomahawk—that can be launched or fired from a range of platforms provide a deterrent capability which, again, represents a useful diplomatic pressure in situations short of conflict.

Accepting this is a role which governments consider the navy should be equipped to undertake, and particularly regarding what is likely to be a continuing uncertain strategic outlook, the Navy League believes that the government should require from the Defence portfolio the following broad capabilities: the ability to man two forward submarine patrols, plus one submarine in reserve and for training; two four-ship task forces deployed within our area of strategic interest; a mine warfare capability to keep open three ports or seaways; the ability to patrol eight coastal surveillance and sovereignty areas, patrol areas; and support for a sea-based battalion group for insertion against light opposition.

For our submarine force this means the national requirement is for seven operational submarines. Collins class submarines have an overall operation availability of 85 per cent. Therefore, our ideal submarine force structure should be at a minimum of eight, which would give you 6.8 submarines operationally available. To be on the safe side, perhaps the order of battle should be nine.

Similar extrapolation for the other combat forces gives a naval force structure of 14 surface combatants, for the surface warfare component. For the mine warfare capability, you would need six minehunters, coastal, four inshore minehunters and the craft of opportunity. You would need 12 offshore patrol vessels and two LPAs, plus the helicopter force and their float logistic support. This is very close to the present naval order of battle currently planned. It therefore remains to be ensured that these ships are provided with a naval war fighting capability to ensure their ability to operate in our region where weapons with increasing lethality are now being acquired.

The Navy League is strongly supportive of the current programs to upgrade the weapon and sensor suites of the FFG and ANZAC frigates and the combat helicopters. In addition, there is a requirement for new heavy torpedo, littoral warfare weapons such as

the Harpoon, five-inch extended-range ammunition, and possibly a Tomahawk as an offensive mining capability. Parallel with this program is the need to constantly address and improve command and control intelligence systems, which is a vital force multiplier as far as naval forces are concerned.

On the question of defence industry, it is clear that our planned force structure is insufficient to support the current throughput of the Australian Submarine Corporation and Transfield and ADI, the principal warship builders in Australia. Yet this is a capability which has been built up over the past 15 years and is essentially world competitive. Integral to this capability are the in-country computer software support and development centres which have been established to meet the dynamic needs of ship, weapon and sensor system integration. In this regard, it is worthwhile pointing out that the computer software systems support in a Collins class submarine is three times that of the space shuttle. At the same time, improved war fighting capabilities are planned for the frigates and air independent propulsion is a possibility for our submarines.

As indicated in our previous submission, we believe some novel thinking is required in this policy area if the national capability is to be retained. Therefore, we have suggested that the government should consider development of a lease-buy program for our Australian-made frigates and submarines which would enable countries such as New Zealand, Canada, South Africa, and ASEAN countries such as the Philippines to acquire near new ships—say, five- to eight-year-old ships—at relatively bargain prices. Thus the first two ANZACS would be leased-bought by the New Zealand government for, say, $200 million each, and an additional two orders, with full weapon sensor upgrades, placed for them for the RAN.With the weapon enhancement program for the Anzacs approximating $200 million per Anzac, there is an attraction in examining such proposals.

Most naval armaments in the world market, including the Royal Navy's Upholder submarines, are all 'dead systems'—and I have used that term because they virtually have no through-life support systems available for them. The advantage to a purchaser of an Australian ship or submarine is that the through-life support in terms of computer software support, logistics and training is guaranteed, with the attendant commercial benefit to Australia. Any commercial objection which the parent company, such as Kockums, may raise in respect of copyright and proprietary rights should and could be negotiated away.

From the foregoing, the committee will appreciate that the application of sea power in the 21st century will remain an influential and useful option for governments like Australia's to consider carefully and in depth; that we turn our back on maritime strategy at our peril; and that we need to think laterally to ensure we retain and enhance the naval war fighting capabilities which we have created in country in the last decade. I thank the committee. Could I ask that this submission be incorporated?

CHAIRMAN—Yes, the committee will receive the submission as evidence. Thank you very much. Could I act as devil's advocate and ask you why, if commercial shipping

to Australia was threatened by a foreign power, we would not respond with the appropriate technology, which is air power, as we did in the Coral Sea and in the battle of the Bismarck Sea over 50 years ago? Why do we have to use a surface navy force, as opposed to a subsurface force, for it?

Cdre Cummins—I can take up that question, Senator. In any war at sea, it is a combination of air, surface and subsurface forces working together that will achieve the goal, backed up by the command and control and surveillance systems, including JORN. That will always be the case. Maritime forces of course include maritime air and those forces deployed—AEW and C, fighter aircraft, P3C Orions and all the weapons systems that are involved in that—and it will be for the maritime commander to choose which way he operates, which way he uses those combat systems, and which way he uses platforms to bring pressure to bear and where to place them.

There has been nothing said or implied by the Navy League's submission that indicates that it is just surface maritime forces. It is always a combination of the maritime forces of the Royal Australian Air Force and the submarine forces, mine warfare and other forces, acting together and backed up, as appropriate, by the command and control.

CHAIRMAN—If I can keep on as devil's advocate, in an age where you have supersonic surface-to-surface missiles and air-to-surface missiles like the SS-N-22, defence of which is quite beyond the RAN in the foreseeable future, why should we commit money to supporting surface ships when they have no survivability?

Cdre Cummins—I would not support the assertion about survivability of surface forces. The surface forces that Australia has and has had over a number of years, and will have with the upgrade programs of the FFGs and Anzac ships, have been specifically balanced to meet the threats in the region from capable weapons systems. As I am sure you are aware, project Nulka, with the decoy, is a key part of that and has been adopted by our ally, the United States, as part of their missile defence.

You use the platform appropriate for the circumstance. Surface forces are able to be placed there and kept there and to carry out offensive roles against other targets, and to defend themselves against air and missile strike to an effective level. It is the maritime commander's role to make sure that he deploys his forces to effectively use them.

Similarly, one can say that airborne forces are vulnerable, and substantially so, to surface fired weapons as well as air fired weapons. It is the balance of these forces. They must be kept up-to-date and current and be provided with the reconnaissance and intelligence information that allows them to be effectively used.

CHAIRMAN—The relevance of the question is that this inquiry is about funding for defence in the years ahead. We are commissioning a new class of ships in the RAN—the Anzac class—and, on commissioning, for the first time in history you have a class of

ship that cannot defend itself. We are involved in a WIP—a war-fighting improvement program—which is going to cost as much as the ship cost to make that ship effective, if it can be made effective. There is some doubt as to whether you can put planar arrays and AEGIS systems on an Anzac ship.

My concern, as a member of parliament, is that I was told by navy when the Anzac program was written that these ships would do what navy required of them. Now, when they come into service, we find that they cannot. Is it a realistic expectation that we will get good service out of these ships if we expend that money that we are going to have to expend to take the war-fighting improvement program to completion, or is there an alternative technology we can follow which will be more productive and more flexible?

Cdre Cummins—The Anzac ship program started over a decade ago and the combat systems that were justified at that stage to go into those ships were appropriate and modern at that time. There has been a very large change in maritime technology in that 10 years and it would be entirely unreasonable to assume that you would not go into an upgrade program when appropriate. The appropriate time is now.

You cannot expect, particularly in software based systems, not to take the opportunity to be able to upgrade. It is a sensible thing to do at this point in the program. It is sensible also to allow in the budget—because we are talking in budget terms and the strain on the budget—an amount of money to continually upgrade your ships. Our previous surface forces have been through major upgrades: the destroyer escorts many years ago with IKARA. The DDGs have been through two upgrades. They were taken from analog to digital combat systems. Those upgrades were budgeted, as part of the process, as separate projects after we got those ships. Of course, the countries that built them originally were doing those upgrades at the time we were buying or shortly afterwards. It is a process of continual upgrade and it is sensible to build this plan in and to have a program to do it.

I was the project sponsor at Navy Office for five years for the Anzac ship program and for the submarine program. It was always envisaged that you would have to go into a major upgrade at some point and that that would have to be funded. It will not be the last time either that there will be major equipment upgrades and changes in those ships through their 30-year life. Ten years from the time that the ships were specified it is appropriate to go to the next stage and to have phased array radars in those ships.

Senator, you talk of a total program cost, which you said was the same cost as the ships concerned. I feel it is probably a little less. From memory, the Anzac ship was $4.5 billion in 1987-88 terms. I may be wrong, but it is of that order. I think the upgrade program is somewhat less than that. Through the whole of the life of those ships, whether it is the FFGs—where also upgrade is intended—and the Anzac ships, the nation will probably spend a whole lot more making sure that they are kept in date with the appropriate weapons and software. It is becoming much easier to upgrade because of

software upgrades rather than having to pull out analog equipment. It is reasonable that that process be put in an orderly way and that that plan should start now.

The trend in the development of equipment—particularly in the United States—is towards coming down both in size and in relative cost and that it be available for smaller ships. This is where we are very fortunate and where the relationship across the Pacific serves us so well.

We can expect that we will be looking at a new class of surface combatants in the near future. Project SEA 1400 is the project concerned. I am sure that when that project is presented by the department, when it comes forward in a number of years time, part of that program will state, '. . . and we will progressively upgrade again that new ship to maintain its relevance.' I think we will find that there will be some new revolutionary aspects of project SEA 1400 as it develops.

There are a number of common systems between all of these assets and common software modules—which is one of the things which led to considerable economies in all of those navy programs as we came forward in the period from 1984. I would like to add how important it is to have those software system support centres run by the navy to maintain the program of skills and to develop those systems within the Australian infrastructure. It means that these sorts of upgrades can be done much more efficiently and effectively and we have control over the intellectual property which is inside those ships.

Cdre Adams—The question of the upgrading of ships is an important one if we are going to provide the presence that we believe we need. Since those ships were built we have acquired two landing ships, each of which can carry a battalion group. If we are going to deploy them, even in a quasi-hostile situation, those ships have got to be protected. They have little protection of their own. The weapon upgrade program provides a degree of protection, both for those valuable ships and the soldiers on board.

The other matter is that the navy has no organic air support and it is unlikely that the air force can provide the ideal overhead air cover. There is therefore a requirement to provide the best missile defence that you can. The missiles being proposed do have a capability to deal with the supersonic missiles which could be in our region in the next decade. You will never provide 100 per cent capability but if you give them the best capability going, the option of deploying a surface force in any situation is that much greater.

CHAIRMAN—This is a financial inquiry, not a war fighting inquiry. One of the questions to be asked is in relation to the very extensive upgrade programs that maybe you are postulating, both for the FFGs and the Anzacs; whether it is money that should be spent on them or whether it should be spent on new platforms. For example, the Anzac has a huge radar signature but it has no stealth characteristics whatsoever. You can wrap all the RAM you like around it, but that is like putting a nappy on it, and is not the long

term solution.

The Anzac has very high IR signatures; it is a very slow ship and it becomes a matter of economic assessment whether we put another $4 billion or $5 billion into the platforms we have, or whether we start with modern technology. That is one of the questions that we have to ask.

Cdre Adams—The upgrade program for the Anzac is $1.6 billion, which is about $200 million for each ship.

CHAIRMAN—It is going to tender.

Cdre Adams—I know, but there is this balance—I agree—that has to be addressed. The question we raised earlier on, when we talked about hulls and platforms, is that the thing that is going to decide the issue in the end is the weapon suite. It is our belief that in the past we have tended to focus a lot on platforms; we have ignored, to a degree, command and control systems and we have ignored, to a degree, the selection of upgraded weapons. Yet it is the weapons system which really has huge capabilities these days. It is the weapon that is going to decide the issue if push comes to shove—and you hope it doesn't.

Mr LEO McLEAY—Can't you put them on larger offshore patrol vessels just as easily as on large frigates?

Cdre Adams—You can do it, but you have not got the sea keeping capabilities and you have not got the ability to deploy that you have with an ocean-going ship. Then you move on to the question of arsenal ships, which would be inappropriate for our area of operations. That is the American concept of literal warfare in the European scene, where you may have to project power ashore and the quickest way that you can control an area is by saturating it with high technology weapons which you would fire from your arsenal ship.

We would not go as far as to say that that is a role for the RAN at this stage of the game, because I do not think we are in the question of power projection on that scale. We are more involved with active engagement, and the best way to actively engage is with forces of the sort that we have at the present time.

CHAIRMAN—I would like to thank you very much for coming along this afternoon and talking to us at length under the two hats you wear. We will be distributing a transcript of the evidence to you later for correction.

[2.55 p.m.]

CHEESEMAN, Dr Graeme Laurence, c/- Friends of the Earth Australia, PO Box 3231, Rundle Mall, Adelaide, South Australia 5000

CHAIRMAN—On behalf of the subcommittee I welcome Dr Graeme Cheeseman, who I understand is representing Friends of the Earth Australia.

Dr Cheeseman, I must advise you that the proceedings here today are legal proceedings of the parliament and warrant the same respect which proceedings in the respective houses of parliament demand. The subcommittee prefers that all evidence is given in public, but should you at any stage wish to give any evidence in private, you may ask to do so and the subcommittee will give consideration to your request.

We have received your submission and it has been authorised for publication. Are there any additions or corrections you wish to make to that submission?

Dr Cheeseman—No.

CHAIRMAN—I now invite you to make a short opening address if you would like to do so before we proceed to questions.

Dr Cheeseman—I have been asked by Friends of the Earth to appear before you. I probably do not represent them, as I do not belong to Friends of the Earth, but I did assist them in preparing their submission and am probably in a position to speak for them, particularly the author, Philip White, who sends his apologies. He is unable to come from Adelaide to speak to you directly, although he would have wished to.

I do wish to make some introductory remarks, which have as much to do with some comments on the Department of Defence submission as the Friends of the Earth, if that is acceptable to you, Chairman.

CHAIRMAN—Yes.

Dr Cheeseman—First, of course, I thank you very much for the invitation to talk to you. It is delightful to be back—in a rather different environment, but it is good to be here.Let me begin by saying that the Defence submission—rightly, in my view—makes it clear that:

. . . whilst percentages of GDP or overall Commonwealth outlays provide useful measures of trends in spending . . . they do not—

and should not—

provide an objective basis for the amount of funding that should be provided.

The level of defence expenditure, as they acknowledge, needs to be determined by a range of other considerations including judgments about likely political, diplomatic, economic and military trends in the region and beyond; contending ideas about the future nature of war, the role of armed force in international relations generally, and the role and functions of armed forces in a post-modern and post-Cold War world; the national resources that are available and able to be allocated to defence; and, last but not least, governmental and broader societal expectations of defence and military. All of those factors go into determining what sort of forces we have and how much we spend on them.

From the Defence Department's perspective, the primary role of Australia's defence establishment is self-defence, defence of Australia, while it is not clear from their submission against what or whom we should be seeking to defend ourselves. The submission starts with the statement:

. . . the Government is committed to the maintenance of a level of military capability which provides confidence of victory over any aggression against Australia.

Later on, though, it qualifies this by arguing:

The level of funding required for the defence of Australia is dependent primarily on an assessment of the capabilities . . . required by Australia to provide a sufficient degree of confidence that we can defeat any military capabilities likely to be used against us.

These are two quite different statements, I think, which point to the contentious issue of capabilities and intentions, and, essentially, risk management locked up with that: should we structure our defence posture around what can be used to attack us or what, reasonably, might be used to attack us? The first approach seeks to reduce the risk of being attacked but increases, perhaps prohibitively, the cost of reducing that risk. The second trades off cost for risk. We gamble that we will not be subject to certain military threats or contingencies, and use the money that is saved for other, perhaps more worthwhile, purposes.

The Defence Department, as you might expect, takes a relatively conservative approach, very close to the first statement it makes in its submission, to this question of risk management. Its force structure planning, certainly since the mid-1980s, is based on having the capacity to be able to deal with existing and projected regional military capabilities—where, I would add, the region of calculation of these capabilities is not defined—and, in addition to this, as far as possible to maintain technological or other 'edges' over prospective regional adversaries. Intentions and motivations appear to play no explicit role in the process of defence planning and force structure development.

While such an approach simplifies decision making—it eliminates the contention issue of who might attack us and why—it is also, I think, open ended. As the military

capabilities in the region continue to expand, both qualitatively and quantitatively, so too must Australia continue to expand its own capabilities and response options. It can do this either unilaterally or in concert with its allies or new found friends, as we seem to be seeing in recent years.

In each case, it seems to me, the logic underpinning the strategy of trying to combat or stay ahead of capabilities will require us to continue to spend more and more on defence. It is not surprising, then, that the department's submission states that, even with the considerable savings accruing from CSP and other efficiency programs, including the DER, some modest real growth in defence outlays from the medium term onwards will be required. I would argue that, given their current approach to defence planning, they will continue to come to government with that argument.

There is a strong case, I think, for reviewing this basic approach to defence planning, simply because it is a kind of treadmill on which we are and which requires increasing costs or increasing money. But also, and perhaps more importantly, I think there is a case to review our existing defence policies, priorities and associated force structures. There were essentially developed during the Cold War and may no longer be as relevant in view of Australia's changing regional circumstances and the continuing transitions in political, economic and social affairs which are serving, among other things, to alter the future likelihood and nature of warfare or conflict in which the ADF is likely to find itself, the role of armed force in international affairs and the roles, functions and social make-up of militaries themselves.

I would again argue that this should be having our Defence planners focusing not on 'the next military'—the projection of what the current military is likely to be in 10 or 20 years' time—but on what is being termed by some people 'the military after next': the kind of military that is beyond the projection of existing mind-sets and structures, that will make use of developments in technology and other revolutionary changes that are going on.

Instead of acknowledging this and trying to incorporate it into defence planning, however, the defence department and its advisers have been busy describing our emerging regional environment in ways that continue to justify the present and planned force structure. Secondly, they are warning that Australia's security will be undermined if we do not follow the lead that they are suggesting. There is a quote in the submission that says:

> If Defence were to be constrained to 0% real growth beyond the end of the decade, it would not be possible to maintain the current capabilities of the ADF, let alone fund the necessary future investments in capability. Furthermore, the effect over time would, even assuming no change to the strategic environment, necessitate reducing the current quality and scale of ADF capabilities and consequently increasing the level of risk to Australia's security.

This returns us to the question of risk. A reduction in the current quality and scale of ADF capabilities may indeed constitute an increase in the level of risk, but is it merely the risk

of improbable or unlikely threats? We are structuring for any threats and all threats, all capabilities. Indeed, does the insistence on being able to meet any prospective military attack on Australia, no matter how improbable, reduce our capacity to deal with threats that may actually arise in the future?

These actual threats may not be traditional military ones, and this last possibility points to the department's selective use of the word 'security'. This is the last point I would like to make. As evidenced by their submission, defence planners seek to isolate and privilege the military dimension of security above all others: security is all about the defence of Australia from military threats, and we will all be secure if we have strong military defences and strong alliances. That is the basic message of the defence department, as you would expect, and I am not surprised by that.

Such a view not only overplays the existence of real military threats, it also ignores the many significant and in some cases growing non-military sources of insecurity. It seems to me that the wellbeing of an increasing number of Australians and key elements of the Australian polity as a whole are under pressure from a number of sources. You are aware of these, but let me rehearse some of them: over one in eight adult Australians are unemployed, our health system is in crisis, more and more young Australians are being denied places in our tertiary education system, and all Australians are suffering from the consequences of global climatic and other environmental disturbances. Australia's rural community and its export earnings are being eroded by continuing desertification and the salinisation of our water systems, and unfair competition from our traditional allies. The wellbeing and independence of Australia's economy as a whole is being weakened by such things as unregulated capital flows, the activities of corporate raiders and the failure or unwillingness of certain manufacturing industries to modernise and become more outward looking.

Defence cannot be made responsible for dealing with all of these so-called 'threats without enemies', although it can play a much greater role in helping combat some of them. It would be perverse in the extreme, though, for the defence establishment to be given more funds at this stage to meet what are, by its own admission, non-existent and highly unlikely military threats, when money and resources are urgently required to protect Australians and Australia generally from a range of existing threats to their security, and to ensure that other arguably more important sectors of the Australian economy can adjust to our increasingly complex and interconnected world.

To conclude my remarks, I am suggesting here that the calls by the defence department and its supporters for more money to be allocated to the defence portfolio should be resisted for two basic reasons. The first is that the current financial problems being experienced by Defence, and which are real for them, are largely of their own making. The department has long known of the pressures on it and their potential consequences, and it has had a number of opportunities to do something about them: the Wrigley review, the force structure review, the 1994 Defence white paper and the recent

defence efficiency review. All of these reviews have introduced some significant changes which have provided more resources and a re-allocation of resources. But in each case they have avoided the fundamental problem of force structure: whether the force structure is the most appropriate, and whether and how it can be changed to suit not only the political circumstances surrounding defence, but the changing strategic circumstances as well.

The second reason for resisting the pressure to give Defence more money at this stage is that the money being asked for could be more profitably invested—at least in the short term—in other areas of the Australian economy. Indeed there is probably a case for some money to be taken from Defence and invested in those other areas of the economy—in research and development, in helping the manufacturing industry become more outward looking, in such schemes as the DIFF scheme and so on—to increase our security generally and, in so doing, enable us to grow individually but also as part of a region and, following on from that, to then begin to build up our defence forces. It is as much a question of priorities as a continuation of providing money. Thank you.

CHAIRMAN—Thank you. My reading of your report indicates that you place a very high priority on the concept of territorial defence. Do you believe it is possible to differentiate an offensive capability from a defensive capability?

Dr Cheeseman—Not intrinsically, no. It is quite clear that capabilities can be used offensively or defensively. The argument about non-offensive defence postures, which I think relate more to the Cold War era than currently, is that strategically we accept the view that the governments of neighbouring countries or countries in the same region do not want to go to war but that, for various reasons, they require military forces. What non-offensive defence, territorial defence and those kinds of strategies do is provide one means—and it is only one means—of reducing the risk of an unintended war or conflict that neither side really wants. So you negotiate, either bilaterally or within the region, to structure forces that do not contain within them the possibility of escalation of small-level conflicts, that do not threaten or worry your neighbours and that help them to understand.

I think it could be argued that Australia's current defence policy is structured along those lines. Indeed the sorts of developments that we are seeing between Australia and Indonesia really, even though the policy makers will not admit this, seek to take these kinds of broader strategic and political concerns into account and are a factor, but only one factor, in defence planning.

CHAIRMAN—In an age of increasingly accurate and affordable missiles of considerable range, the concept of territorial defence is surely possessed of some limitations.

Dr Cheeseman—Yes, that is true.

CHAIRMAN—There are many counters to the missile threat, but one of the fundamental ones is the destruction of the base from which they are operating.

Dr Cheeseman—That is true.

CHAIRMAN—It is, arguably, the most affordable way of doing it because intercepts in flight are extremely complex and have not yet been fully developed.

Dr Cheeseman—I accept that. Against the strategic benefits of these kinds of approaches to defence there are operational and tactical costs. The argument really is that you use the strategic benefits to establish a kind of security environment in which the costs are not brought to bear and there is no conflict. You cannot guarantee that, I agree entirely.

In addition to that, I think the alternative response is to maintain forces that can attack missile bases or can attack cities in other countries. That, of course, raises the stakes if there is a small conflict between adjoining countries. The presence of strategic strike forces begins to worry defence planners. Once you flip into low-level conflict, are they going to use them pre-emptively? What can we do? Should we strike first? That kind of fear was most evident during the Cold War, of course, with the nuclear dimension and the implications of that. There are costs as well as benefits to maintaining strategic strike forces as well.

What I argue in my writings is that both those need to be taken into account and not just one side. More broadly speaking, the argument is that territorial defence, as defined in this submission, should not be seen in isolation but part of a broader set of foreign and defence policies which include improving institutional arrangements that are leading to regional security which operate within the context also of use of forces for international security operations and so on. It should not be seen in isolation; it should be seen as one element of a broader strategy.

CHAIRMAN—What are the basic capabilities that you require for territorial defence?

Dr Cheeseman—Territorial defence can be achieved in a number of ways. Essentially, territorial defence relies on dealing with a military threat once it arrives on your actual shores or within your immediate region of interest. It can be very similar to Australia's current approach where you seek to deal with the threat as it crosses your sea-air gap and, in that case, you would use maritime forces. Alternatively, you could make a decision to focus on land forces and so on. Again, it is a trade-off and there are various ways of doing it.

What I am suggesting in Australia's case, which is not reflected in the submission given to you, is that essentially I think we have to acknowledge now that the likelihood of

Australia being directly attacked and invaded by large-scale military forces in the future is declining and declining significantly. That is accepted by the current defence planners. It seems to me that we can downgrade and maintain certainly a means of defending ourselves, but for the short term we could focus on existing threats rather than these phantom invasion threats. We should, while maintaining this capacity to deal with existing threats and perhaps expand to deal with likely possible higher-level threats, focus our efforts on regional and international security and use the ADF more in those roles and structure accordingly.

CHAIRMAN—If we go down that path we need a ready reaction capability in some dimension, don't we?

Dr Cheeseman—Yes. I have spelt that out in my own writings. What I have suggested is that we could have, essentially, a reserve base force or a militia force which forms the basis of the defence of Australia but, as part of that, you might have a ready reaction force that could be used either for regional security as part of a regional security structure or as part of a UN based international security force. What you are doing really is making decisions about priorities.

At the moment, the current defence posture operates at three levels, as you know—national defence, regional security and international security. Our current priority is on national security but increasingly more resources are going into regional security. I would argue that, given the changes in the region and given the prospects of future war and where we are heading in the future, Australia could afford to focus its efforts more on regional and international security and less on the defence of Australia and that that, in the future, should begin to generate thinking on how we structure and develop our force structures.

Mr LEO McLEAY—Looking at the submission we had from the defence department, it would seem that the technological advantage that Australia had is being rapidly eroded. How does that mix with your idea that we should, in effect, give that technological advantage away?

Dr Cheeseman—I think it already is eroded. I noted there was some discussion on it before. We have moved from a position of saying we no longer have an edge in physical capabilities, but our edge operates in that we are better trained and able to use our forces more appropriately. That may be true, but it may also be ethnocentrically driven. I think, as a matter of principle, we should not be on this kind of treadmill. We have to accept that, over time, economic factors mean that we just cannot stay ahead of developments in the region, that the changing nature of the international arm's trade, where major suppliers, including the United States, are quite happy to sell state-of-the art advanced weapons to all countries in the region means that it is a false expectation that we can somehow stay ahead of the region.

We need to look at alternative approaches. One is to get off the treadmill to start with, to accept that we cannot stay ahead and it is foolish to try to do so. If that is the case, what should we do? One option is to pursue the regional engagement strategy, where we seek to engage with our potential adversaries and, in some way, prevent a conflict or needing to get into a conflict in the first place.

A second option might be to move closer to the United States and rely on them giving us a technological edge. Again, I think that that will only last for a short term.

It seems to me that the whole idea of the technological edge is of somehow dealing with a dynamic region by planning to deal with capabilities. It is self- defeating in the end, because economically we cannot do so. It will cost more than we are able to pay on it.

Mr HICKS—I remember just recently reading an article. Please do not hold me to this, but I think it was by Russell Madigan. You have heard of Russell Madigan, of course. He said, from memory, that no nation in known history has held so much territory, with so few people, with so much wealth, for so long, without having to fight for it. I wonder what your comment might be on that statement.

Dr Cheeseman—That is an interesting issue. Essentially what we have is a strategic and broad popular culture in Australia that stems from our experiences. Our location at the foot of Asia has made us fearful for various reasons. That sense of fear or expectation that we may somehow not deserve to have all this land, that someone is going to come and take it away from us, has remained in our basic psyche. It continues in many ways to drive defence planning and popular expectations of defence.

The important aspect, whether we think it is so or not, is that we need to recognise that it is a cultural and psychological dimension to the way we think about things. It may be that, rather than continue to be driven by those fears, we try to recognise that they are fears. They may be located more in our own minds than in our environment. To some extent, that underpins the debate that is going on now about what Australia represents, where it is in the region. Is it part of the region, is it something else? It is an extremely important element that underpins the whole question of what defences are, what we should be seeking to do and so on. You could argue, and I have in other forums, that Australian defence planners are driven too much by these fears, that they look for threats where they do not exist. They say that that is prudent, but it might well be a factor that comes from our experience and from our traditional fears of Asia, and so on.

CHAIRMAN—As there are no further questions, thank you very much for attending this afternoon, Dr Cheeseman.

Subcommittee adjourned at 3.23 p.m.