

OPERATIONAL CAPABILITY

10.1 The originally planned delivery dates for the Collins class submarines were *Collins* in January 1995, *Farncomb* in February 1996, *Waller* in January 1997, *Dechaineux* in December 1997, *Sheean* in November 1998 and *Rankin* in October 1999.¹ However, at the time of the Committee's first public hearing in April 1998, the Navy had provisionally accepted only two Collins submarines, and these were not operational. On 30 April 1999, the third submarine, *Waller*, was provisionally accepted by Navy.

10.2 Defence stated in April 1988 that in the current strategic circumstances, its reduced capability of two operational Oberon class submarines (*Onslow* and *Otama*) was acceptable.²

10.3 Evidence taken at the hearing indicated that due to the delays, commissioning of the Collins class submarines would not coincide with de-commissioning of the Oberon class submarines. Defence acknowledged that training difficulties associated with having only two operational submarines, and operating different classes of submarines, were significant.³

10.4 In March 1999 the Oberon submarine *Onslow* decommissioned, and submarine capability was reduced to one fully operational Oberon, the *Otama*. Defence told the Committee that this further reduced capability was still considered acceptable.⁴

1 Cdre Eoin Asker, Director-General, Undersea Warfare Systems. DAO, *Transcript*, 5 March 1999, p. PA 95.

2 *Transcript*, 29 April 1998, p. PA 46.

3 Rear Adm. Christopher Oxenbould, Deputy Chief of Navy, Royal Australian Navy, Department of Defence, *Transcript*, 29 April 1998, pp. PA 46, 77.

4 Rear Adm. Christopher Oxenbould, Deputy Chief of Navy, Royal Australian Navy, Department of Defence, *Transcript*, 5 March 1999, p. PA 98.

10.5 Defence's initial expectation was that it would have five operational Collins submarines at this time and that the Oberons would have been decommissioned.

10.6 Defence acknowledged that it did not currently have an operational capability in the Collins class. The one Collins submarine operating in the fleet was used for training purposes and to gain further experience. Defence expressed confidence that by the end of 1999 it would be able to be deployed over the full range of its capabilities.⁵ When pressed, Defence did acknowledge some capability in the Collins submarines which were currently at sea, but stated that their deployment would depend very much on the strategic circumstances and the risk the Government was willing to accept.⁶

10.7 The Committee sought more information from Defence in relation to submarine capacity, past, present and planned.

10.8 In response to Committee questions, Defence informed the Committee that:

- the current submarine capacity was less than the capacity of the mature fleet of six Oberons (of which four could be expected to be available at a given time for operations);⁷
- an acceptable drop in submarine capacity during the phase in of the Collins class had always been planned, however the actual drop in capacity which had occurred through delays was the equivalent of one to two Oberons greater than planned;⁸ and
- when the mature fleet of six Collins submarines was available, five could be expected to be available for operations at any given time, and, as the Collins

5 Rear Adm. Christopher Oxenbould, Deputy Chief of Navy, Royal Australian Navy, Department of Defence, *Transcript, 5 March 1999*, pp. PA 98-9.

6 Rear Adm. Christopher Oxenbould, Deputy Chief of Navy, Royal Australian Navy, Department of Defence, *Transcript, 5 March 1999*, p. PA 121.

7 Rear Adm. Christopher Oxenbould, Deputy Chief of Navy, Royal Australian Navy, Department of Defence, *Transcript, 5 March 1999*, p. PA 93.

8 Mr Garry Jones, Deputy Secretary, Acquisition, Department of Defence, *Transcript, 5 March 1999*, p. PA 94.

were significantly more capable than the Oberons, it would therefore provide a much greater overall submarine capability.⁹

10.9 The Committee asked Defence if, in retrospect, the phase-out of the Oberons and the phase-in of the Collins could have been better planned, and whether it had been somewhat naïve to take on such an ambitious project and not to have expected significant development delays.¹⁰

10.10 Defence considered that:

... if the same decisions were taken today, the government and Defence would be prepared to pay more to have less of a dip in the capability.... That still would not have dealt with the issue of the delay but would have ameliorated it.¹¹

10.11 On the issue of schedule contingency, Defence considered that there was a general unwillingness to allow for contingencies in the schedule:

It seems to me that your assumption is correct, that even with the best planning in the world the prospect of building that submarine exactly as planned to the contract date originally set out was quite low. One of the reasons for that ... is that [the Commonwealth takes] on some of the risks—the so-called ‘force majeure risks’ the probability of delivering that submarine on that contract date was probably about zero....¹²

10.12 Defence admitted that it was a continual source of difficulty for the acquisition area of the Defence Organisation to negotiate and secure any schedule contingency in the projects run by Defence:

I think if you want to criticise the defence organisation, it is principally in that area that we are most subject to

9 Mr Garry Jones, Deputy Secretary, Acquisition, Department of Defence, *Transcript, 5 March 1999*, p. PA 94.

10 *Transcript, 5 March 1999*, p. PA 122.

11 Mr Garry Jones, Deputy Secretary, Acquisition, Department of Defence, *Transcript, 5 March 1999*, p. PA 122.

12 Mr Garry Jones, Deputy Secretary, Acquisition, Department of Defence, *Transcript, 5 March 1999*, pp. PA 122-3.

*criticism—that we were too confident about the prospect of no schedule slippage.*¹³

10.13 Defence continued:

*... at least part of this issue is the Australian perception about what success is in these major projects, and an expectation that everything will work perfectly right on time, which I think is not a realistic expectation in these sorts of things. The other alternative is not to do these very complex things.*¹⁴

10.14 The Committee asked Defence for an explanation of the process of acceptance of the submarines.

10.15 Defence replied that when a submarine had reached a point where it was going to be of value to the Navy to conduct further trials, where the training that was needed for the submarine crews could be conducted and where it allowed Defence to gain information, the ASC delivered the submarine to the Defence Acquisition Organisation which would normally pass it immediately to the Chief of Navy, who provisionally accepted the submarine into naval service.¹⁵

10.16 Defence continued:

*After the provisional acceptance ... we have to go through a series of work-ups of the crew and further sea trials.... Normally you would expect, especially with the first of class, in the order of at least a year of trials after the provisional acceptance [before] we would accept the submarine into naval service.... The acceptance into naval service is when [the submarine] is fully compliant with what has been contracted and it meets all those requirements.*¹⁶

13 Mr Garry Jones, Deputy Secretary, Acquisition, Department of Defence, *Transcript, 5 March 1999*, p. PA 123.

14 Mr Garry Jones, Deputy Secretary, Acquisition, Department of Defence, *Transcript, 5 March 1999*, p. PA 124.

15 Cdre Eoin Asker, Director-General, Undersea Warfare Systems. DAO, *Transcript, 5 March 1999*, pp. PA 95-6.

16 Rear Adm. Christopher Oxenbould, Deputy Chief of Navy, Royal Australian Navy, Department of Defence, *Transcript, 5 March 1999*, pp. PA 96, 104.

10.17 Defence expects the first of the Collins submarines (*Collins*) to be accepted into naval service at the end of the year 2000:

*Before that date, we would be able to deploy the Collins operationally and it would reach the minimum standards that the Chief of Navy has set for deploying the Collins class into conflict situations of operation.*¹⁷

10.18 Defence stated that by the end of 1999 it expected to have three Collins class submarines available (*Collins*, *Farncomb* and *Waller*), and sufficient capability within the class to allow the remaining Oberon to be decommissioned.¹⁸

10.19 The Committee asked several questions about the personnel, maintenance and associated costs associated with keeping two different classes of submarine operational.¹⁹ The Committee made the point that while the contractor may not be being paid additional funds, the Commonwealth was paying more through having to sustain alternative capacity. The Committee thought the delays must also be impacting on training schedules and morale.²⁰

10.20 Defence replied that the additional costs might be in the order of costs associated with 1.5 submarines for a period of two years.²¹ However, Defence claimed that the costs of running the Oberons had been offset to a large degree by the fact that some of the Collins class submarines had not been operating because of the slippage within the Collins program.²²

17 Rear Adm. Christopher Oxenbould, Deputy Chief of Navy, Royal Australian Navy, Department of Defence, *Transcript, 5 March 1999*, p. PA 104.

18 Rear Adm. Christopher Oxenbould, Deputy Chief of Navy, Royal Australian Navy, Department of Defence, *Transcript, 5 March 1999*, p. PA 105.

19 *Transcript, 5 March 1999*, pp. PA 116-17.

20 *Transcript, 5 March 1999*, p. PA 117.

21 Cdre Eoin Asker, Director-General, Undersea Warfare Systems. DAO, *Transcript, 5 March 1999*, p. PA 116.

22 Rear Adm. Christopher Oxenbould, Deputy Chief of Navy, Royal Australian Navy, Department of Defence, *Transcript, 5 March 1999*, p. PA 116.

10.21 Defence put forward the view that:

*In a sense, these things have a finite life. In the period in which there was a delay, if it had turned out that we did not need [the submarines], we would actually acquire that extra life at the end. So in some ways there is also a saving.*²³

10.22 In terms of submarine crews and training, Defence noted that on the original Collins delivery schedule, it had expected to have to provide eight submarine crews in 1998 from a small arm of six to seven hundred people and said it would have had some logistical difficulties in doing so.²⁴

10.23 In response to the Committee's question about whether any additional refitting of the Oberons had been required because of the delivery delays, Defence acknowledged that in December 1998 Defence had committed HMAS *Otama* to a mid-cycle docking at a cost of approximately \$6 million to keep it operational until the end of the year 2000, should that become necessary.²⁵

10.24 The Committee sought to quantify the delay in delivery of the Collins against the originally planned delivery schedule.²⁶

10.25 Defence estimated that the submarine project was 20 months behind the originally contracted schedule.²⁷

10.26 ASC argued that the submarine project was precisely on time for its scheduled delivery in June 2001, and that the delivery would probably be earlier.²⁸

23 Mr Garry Jones, Deputy Secretary, Acquisition, Department of Defence, *Transcript, 5 March 1999*, p. PA 117.

24 Rear Adm. Christopher Oxenbould, Deputy Chief of Navy, Royal Australian Navy, Department of Defence, *Transcript, 5 March 1999*, p. PA 124.

25 Rear Adm. Christopher Oxenbould, Deputy Chief of Navy, Royal Australian Navy, Department of Defence, *Transcript, 5 March 1999*, p. PA 117.

26 *Transcript, 5 March 1999*, p. PA 95.

27 Mr Garry Jones, Deputy Secretary, Acquisition, Department of Defence, *Transcript, 5 March 1999*, p. PA 95.

28 Mr Hans Ohff, Managing Director, ASC, *Transcript, 22 March 1999*, p. PA 141.

10.27 When the Committee queried ASC's statement, Defence stated that amendments to the originally contracted delivery dates had moved delivery dates back and the ASC was referring to the current contract which existed between ASC and the Commonwealth.²⁹

10.28 ASC told the Committee that under the *force majeure* provisions of the contract, ASC was entitled to, and had been granted, time extensions. ASC maintained that the project was on schedule.³⁰

10.29 Defence agreed that it created an unrealistic expectation that the products would be delivered as originally contracted, when the reality was that that was most unlikely to occur.³¹

10.30 The Committee pointed out that Defence's forward planning in relation to its submarine capability seemed not to have taken any substantial delay into account.³²

10.31 Defence replied that it had some contingency planning in place which allowed it to retain a submarine capacity should a slippage occur. However, Defence did agree that one fully operational submarine and a level of capability provided by the Collins submarines which had been provisionally accepted, was below its initial expectation that there would be five operational submarines at this time:

... we could not maintain the force of six submarines operational at all times because we did not have the people to do that and we had to take the crews from the Oberons and retrain them for the Collins class. So we had to accept a dip [in capability]. What we were planning was for a dip down to about three submarines and then that would build up to the mature Collins fleet of six....³³

29 Cdre Eoin Asker, Director-General, Undersea Warfare Systems. DAO, *Transcript*, 22 March 1999, pp. PA 142-3.

30 Mr Hans Ohff, Managing Director, ASC, *Transcript*, 22 March 1999, p. PA 143.

31 Rear Adm. Richard Lamacraft, Head Systems Acquisition (Maritime and Ground), DAO, *Transcript*, 22 March 1999, p. PA 144.

32 *Transcript*, 22 March 1999, p. PA 145.

33 Rear Adm. Christopher Oxenbould, Deputy Chief of Navy, Royal Australian Navy, Department of Defence, *Transcript*, 22 March 1999, pp. PA 145-7.

10.32 Defence told the Committee that one form of insurance it had in case of delay in delivery of the Collins was the ability to extend the Oberon class to the extent of their spare running time before having to undertake a major refit of them. However, Defence stated that the limitation at that point was that the refitting cost was in the order of \$120 million for each submarine and took two years to carry out for a five-year diving cycle.³⁴ Defence added:

*We have executed that contingency by putting Otama into a mid-cycle docking and allowing her to extend. Similarly, we have run on Onslow from October 1997, when it was initially planned to be decommissioned, and she [decommissioned in March 1999].... That allowed us to keep some submarine capability so that we never got to the point where there would be none at all.*³⁵

10.33 Defence acknowledged that it had looked at whether there was a need to put another Oberon class into refit to allow the option of running it through for five years operations to maintain submarine capability.³⁶

10.34 The Committee established that Defence planned to decommission the *Otama* at the end of 1999 but that it had the capacity to serve until the end of 2000 if necessary.

10.35 ASC outlined for the Committee the current delivery schedule for the Collins submarines:

There are currently two submarines handed over by the Australian Submarine Corporation and we will hand over the third one inside the next few weeks. By the end of [1999] we will have handed over four submarines to the Royal Australian Navy. Under my contract, I do not have a clause of provisional acceptance. That must be a clause between the acquisition office and the Navy. It is not a clause which refers to my contract.... There are outstanding items which

34 Rear Adm. Christopher Oxenbould, Deputy Chief of Navy, Royal Australian Navy, Department of Defence, *Transcript, 5 March 1999*, p. PA 97.

35 Rear Adm. Christopher Oxenbould, Deputy Chief of Navy, Royal Australian Navy, Department of Defence, *Transcript, 22 March 1999*, p. PA 147.

36 Rear Adm. Christopher Oxenbould, Deputy Chief of Navy, Royal Australian Navy, Department of Defence, *Transcript, 22 March 1999*, p. PA 147.

*still need to be corrected and they are contained in a so-called TI338 list. We are addressing these issues.*³⁷

10.36 In response to a Committee question, ASC confirmed that there were combat system issues on the TI338 list.³⁸

10.37 Referring to the TI338 list, Defence added that it was a very important document which listed those areas where the submarine did not yet meet full contract specifications. Defence added:

*... it is to the advantage of [Defence and ASC] to hand over the submarine at some point. If we waited until the submarine fully complied with everything which was specified in the contract, we would not be able to get the value out of training and out of gaining the experience in the use of the submarine and being able to use the submarines as we are now.*³⁹

10.38 ASC explained that in bringing a submarine to acceptance in accordance with the contract, ASC had to fulfil a number of conditions. These conditions were defined as achieving licences 1 through 5 to get the submarine ready for handover. ASC stated:

*The other conditions that we will have to meet are the category of testings, and they are categories 1 through 7. [ASC has] to comply with categories 1 through 5. Categories 6 and 7 are categories that have been addressed by Navy and only after 6 and 7 have been completed can the submarine be commissioned.*⁴⁰

10.39 Defence stated that the submarine was tested against the contractual performance specifications before it was provisionally accepted and would have achieved category 5 tests by the time it was handed over. Defence confirmed that

37 Mr Hans Ohff, Managing Director, ASC, *Transcript, 22 March 1999*, p. PA 146.

38 Mr Hans Ohff, Managing Director, ASC, *Transcript, 22 March 1999*, p. PA 149.

39 Rear Adm. Christopher Oxenbould, Deputy Chief of Navy, Royal Australian Navy, Department of Defence, *Transcript, 22 March 1999*, p. PA 154.

40 Mr Hans Ohff, Managing Director, ASC, *Transcript, 22 March 1999*, p. PA 148.

category 6 and 7 trials were carried out by Navy once the submarine had been delivered and was operating under naval control. The purpose of category 6 and 7 trials was to define the outer edges of the performance envelope:⁴¹

*To get to this point we call accepted into naval service, these categories 6 and 7 trials must be completed, but the point is there is not a performance level specified in there which might have to be satisfied.*⁴²

10.40 Defence told the Committee that by the end of 1999 it expected to be able to use four Collins submarines for training, to assist surface ships in training and antisubmarine warfare; and to commit them to peacetime exercises. Defence said they expected the submarines to be deployable for some limited form of operations and to be deployable over the full spectrum of their operations by the end of the following year.⁴³

Committee comments

10.41 The Committee considers the fact that the operational submarine squadron is down from a fleet of six, to one aging Oberon, is not a positive reflection on Defence's management of the submarine project or its force strategy planning.

10.42 The fact that Defence has not as yet accepted any Collins submarines into naval service highlights the unrealistic nature of Defence's initial expectation that it would by now have five operational Collins submarines.

10.43 The Committee also notes that *Collins* was originally expected to be accepted into naval service in February 1996. It is not now expected to be accepted into naval service until the end of the year 2000, almost five years later than planned.

41 Cdre Eoin Asker, Director-General, Undersea Warfare Systems. DAO, *Transcript*, 22 March 1999, p. PA 148.

42 Rear Adm. Richard Lamacraft, Head Systems Acquisition (Maritime and Ground), DAO, *Transcript*, 22 March 1999, p. PA 149.

43 Rear Adm. Christopher Oxenbould, Deputy Chief of Navy, Royal Australian Navy, Department of Defence, *Transcript*, 22 March 1999, p. PA 147.

10.44 The Committee considers the varying perspectives of ASC and Defence, based on contract amendments, about whether the submarine project is 20 months late or not, is irrelevant. The fact is that Defence had a clear expectation that the delivery of the submarines would be largely in line with the delivery schedule in the original contract, and had made very modest contingency plans for delivery delays.

10.45 **Recommendation 6**

The Committee recommends that realistic allowances for contingencies be made in delivery schedules for major Department of Defence projects and changeovers in platform types.

10.46 Defence's claims that there have been some offsetting cost savings from the delay in submarine delivery have some merit. However, the Committee is of the view that if the submarines were not needed at their planned delivery time it would be merely fortuitous. The extended life span would not be evidence of successful forward planning.

10.47 Moreover, the Committee considers that the delays heighten concerns about the submarines' shelf life, and increase the challenge of the submarines' remaining at the leading edge of technology through their life.

10.48 The Committee has noted the recent press reports that half of the 42-member crew which has been conducting trials on the *Waller*, intended to resign on the vessel's delivery to Navy on 30 April 1999. The Navy has publicly acknowledged that the extended trials process had been frustrating for the crews and that the high turnover was a serious problem, with Navy having some trouble training the necessary replacements.

10.49 The Committee is concerned that the training difficulties in running two different capabilities side by side, the delays in delivery of software, the continuing need for rectification of defects and completion of contractor sea trials are clearly affecting submarine force structure, preparedness and morale.

Other issues

10.50 The Committee has concluded that several issues require further review.

10.51 The Committee did not investigate, at its hearings, the issue of through-life support for the submarines and the associated contracts. The Committee notes, however, the Audit Report statement that the Collins class in-service support contracts could prove to be some of the most costly set of service contracts ever offered by the Commonwealth and that in-service support contractors were expressing concern about Defence's slow progress in providing them with a clear understanding of the scope of work they might be contracted to undertake.⁴⁴

10.52 The Committee understands that the contractual requirement for ASC to provide support for the submarines for 11 years after the last submarine delivery is not defined and that many submarine support issues remain undetermined.

10.53 The Committee thinks that ensuring there is the capacity to sustain the submarines through their life and maintain and upgrade their systems is a major issue. Recent statements from ASC about uncertainty in relation to maintenance contracts and the potential loss of expertise underline the Committee's concern on this matter.

10.54 The Committee understands that there is also uncertainty about the Government's intentions in relation to the sale of its holding in ASC, and the timing of any step to proceed in that direction. Such uncertainty may have an effect on ASC's ability to make sound commercial decisions and could ultimately have implications for Australia's future submarine capabilities.

10.55 The issues of through-life support for the submarines, whether an industry capability is sustainable and the resolution of the Commonwealth's status as a shareholder remain to be addressed by the Government.

44 *Audit Report No. 34, 1997-98*, p. xxiii.

10.56 The Committee considers that the matter of through-life support should be addressed as a matter of urgency.

10.57 **Recommendation 7**

The Committee recommends that the Government urgently address the outstanding issue of through-life support for the Collins submarines.

Bob Charles MP
Chairman

2 June 1999