Aide Memoire

Date : 2001-08-27

Notes : All references in this Aide Memoire to "Annexures" are for **reference purposes only** and are not provided as annexures to this Aide Memoire. A *Table of Contents* is provided at the end of this document.

I, **Richard Michael Moberly Young**, hereby state that :

Personal Background

1. I am the Managing Director of CCII Systems (Pty) Ltd, also known as and referred to as C²I² Systems, C²I² or C2I2.

2. CCII Systems (Pty) has its principal place of business being at Unit 3 Rosmead Place, 67 Rosmead Avenue, Kenilworth.

3. I am a professional electronics engineer, registered with the Engineering Council of South Africa (ECSA).

4. Academically, I have a Master of Science in Engineering degree from the University of Cape Town (1992) and a Doctorate of Philosophy in Engineering from the University of the Witwatersrand (1996). In both cases my field of specialist research was the application of computer networks in real-time, mission-critical, distributed systems. The title of my master's degree dissertation was *Real-Time Distributed System Architecture using Local Area Networks* and that of my doctoral thesis was *Real-Time Protocol Strategies for Mission-Critical Distributed Systems*. I believe that this qualifies me in being able to express a professional opinion on the technical aspects of the matter I wish to address in this testimony.

5. Where in my evidence I refer to any classified document, I do not attend to submit it as an exhibit at all or to refer to its content beyond what is actually quoted in my evidence. However, I do have some of the documents in question in my possession and would be willing to make them available on such basis as the Public Protector might direct with the consent of the Minister of Defence.

Introduction

6. C²I² Systems has been accredited since August 1996 by Armscor as a supplier of specialised software and computer systems for naval, airborne and mobile applications. Such accreditation by Armscor is only achieved after comprehensive review by Armscor of the company's technical, financial, quality, configuration management and security management processes and systems.

7. C²I² Systems has been accredited with Armscor since 1996 and re-accredited since 12th September 2000 to handle SANDF projects with a security classification of up to and including *Secret*.

8. I personally have and have had since 1992, a security clearance of *Top Secret*. Before that, since 1976, I have had a security clearance of *Secret*. Therefore both the company and I are cleared to handle the project documentation relating to the Corvette acquisition under Project Sitron and other related SA Navy projects.

History - My Own Involvement

9. In 1983, South Africa started developing combat suites for naval vessels. A combat suite is a set of systems that enables a naval vessel to engage in naval combat.

10. In 1985, I starting working for a company called Trivetts-UEC (Pty) Ltd, then owned by the Tongaat-Hulett Group and was personally involved in developing a combat suite for our submarines. This company later became UEC Projects (Pty) Ltd, which later became Altech Defence Systems (Pty) Ltd, then 100% owned by the South African electronics group Altech Ltd. I left UEC Projects (Pty) Ltd in early 1992 in order to continue my academic studies.

The Role of ADS and Thomson-CSF

11. At this stage I believe that it is appropriate to deal briefly with corporate transactions as this is relevant to at least two issues; namely the conflict of interest on the part of Mr Shamin (Chippy) Shaikh and the justification in dealing with ADS and Thomson-CSF on the ostensible basis that it was a local company.

12. On 22nd January 1998, the Cape Times, in a report entitled *Altech's buyer presents a mystery of motive as well as identity*, dated 22nd January 1998, announced that the Altech Group was to sell off 50% of Altech Defence Systems (Pty) Ltd to Thomson-CSF of France(Annexure Axx).

13. On 12th March 1998, the Altech Group announced publically that it was to sell off 50% of Altech Defence Systems (Pty) Ltd to Thomson-CSF of France. Here I make reference to the Business Report article entitled *Altech to sell half its defence business*, dated 13th March 1998. They also announce, presumably in a press statement and reported in the Business Report, that they "*planned to take on a black economic empowerment partner within the next few months to complete the deal*."(Annexure Axx).

14. On 28th April 1998, 50% of the shares in Altech Defence Systems (Pty) Ltd were transferred to Thomson-CSF of France.

15. On 19th February 1999, the remaining 50% of the shares in Altech Defence Systems (Pty) Ltd were transferred to Thomson-CSF of France.

16. On 22nd February 1999, the Altech Group announced publically that it had sold off the remaining 50% of Altech Defence Systems (Pty) Ltd to Thomson-CSF of France. Here I make reference to the Business Report article entitled *Altech sells defence arm to French group*, dated 23rd February 1999(Annexure Axx).

17. Pierre Moynot, the CEO of ADS, also announced, presumably in a press statement and reported in the Business Report of 23rd February 1999, that "*the group remained committed to placing a block of shares in the hands of a black economic empowerment partner*.".

18. Subsequently, the Thomson-CSF shares in ADS were transferred to Thomson-CSF International, a company incorporated in France.

19. On the 27th November 1999, Thomson-CSF International transferred 80% of the shares of Altech Defence Systems (Pty) Ltd to Thomson-CSF Holding (Southern Africa) (Pty) Ltd and changed the company name to African Defence Systems (Pty) Ltd (ADS)(Annexure Axx).

20. Thomson-CSF Holding (Southern Africa) (Pty) Ltd was on incorporated on 14th May 1996, with 85% of the initial shareholding owned by Thomson-CSF of France, 10% owned by Nkobi Investments (Pty) Ltd, a South African company and 5% by Gestilac S.A., a company registered in Switzerland(Annexure Axx).

21. One of the shareholders of Gestilac S.A. is one Jean-Yves Ollivier, a French national, who I understand to be an intermediary of Thomson-CSF in connection with various international business deals.

22. Gestilac S.A. was subsequently dissolved or de-registered as a company in Switzerland on 12th October 2000(Annexure Axx).

23. Nkobi Investments (Pty) Ltd is a wholly-owned subsidiary of Nkobi Holdings (Pty) Ltd.

24. Nkobi Holdings (Pty) Ltd has as one of its major shareholders and directors a Mr Schabir Shaikh, also known as Schabir Shaik, brother of Mr Shamin (Chippy) Shaikh, Chief of Acquisitions of the Department of Defence.

25. Mr Schabir Shaikh became a director of Thomson-CSF Holding (Southern Africa) (Pty) Ltd on incorporation on 14th May 1996(Annexure Axx).

26. Mr Schabir Shaikh is also a director of ADS(Annexure Axx).

History - Combat Suite Development in South Africa

27. Previously, the SA Navy (SAN) had realised that, for strategic reasons, the country needed to develop sophisticated, indigenous Combat Suites for both surface and sub-surface combat vessels.

28. Once the previously-mentioned submarine combat suite project altered course in 1989, the SA Navy and Armscor started technology studies and system design on the frigate programme, also in 1989.

29. When this previous frigate acquisition programme commenced , i.e. Project Falcon with the Combat Suite part thereof being termed Project Frizzle, the aim there was also to move to a system architecture based on a databus, i.e. a computer data network, with the system architecture being based on a proper local area network, as opposed to a simple databus as was the case of the submarine combat suite.

30. I was involved in these technology studies and system design efforts while working at what was then UEC Projects (Pty) Ltd between 1989 and 1991. In fact, I was responsible for the network technology studies and technology demonstrator development, with these projects being successfully completed by the middle of 1991.

31. To circumvent the problems commonly encountered on modern warships where the ship’s systems employ high degrees of automation using electronics, as well as many high-power radiating transmitters and sensitive electronic sensors, the SAN specified the use of fibre optic cabling for the Combat Suite data network.

History - The Patrol Corvette Combat Suite

32. After Project Falcon was cancelled in 1991, Project Sitron was initiated in 1993, this being the programme for the acquisition of Patrol Corvettes for the SAN (SAN PC).

33. For Project Sitron, the SAN, advised by Armscor, wanted and specified a :

"*Combat Suite designed around the principles of distributed processing within independent functional modules physically integrated around a modern multirole redundant databus infrastructure linking the various system elements.*" Here I make reference to the *Programme Plan for Project Sitron: Combat Suite* - Classification Confidential dated 25th January 1995, hereinafter referred to as the *Programme Plan*(Annexure Axx).

"*The Corvette Combat Suite shall be a modern, LAN-based Naval Combat System with a distributed processing architecture*". Here I make reference to the *SA Navy's Patrol Corvette Combat Suite Requirements Specification* - Classification Confidential Issue 2 dated 5th March 1999, hereinafter referred to as the URS(Annexure Axx).

34. A *LAN* ("L A N") is a *local area network* which is term for a serial computer data network having specific attributes, particularly *broadcast* and *network order*. A *bus* or *databus* is a LAN with a specific topology, i.e. a spatial layout. A *bus* is a simple topology where all nodes connect directly to a single data access medium.

35. Being a mission-critical, distributed, real-time system, the Combat Suite requires a sophisticated LAN with high performance, extensive capabilities and high reliability.

36. The SAN specifically wanted to move away from point-to-point architectures as these had been found to be extremely limiting by the SAN, as well as by other navies.

37. A point-to-point data link is where one communicating node connects exclusively to another node. A point-to-point system architecture consists of many cross-connected point-to-point links.

38. As I'll explain later, the DoD has now in its selection of the Detexis Diacerto data "bus" effectively gone back to a point-to-point system; although it is actually a hybrid of a point-to-point interconnection system and a simplistic backbone network. Such a hybrid network cannot be construed as **local area network**. The point-to-point part of the network also employs copper media, so it diverges from the SAN's own specified requirements.

39. This hybrid architecture can be viewed as a set of point-to-point links connected to two telephone exchanges (or switches), one situated forward in the Corvette and the other aft. These two telephone exchanges are connected by a trunk connection system, i.e. the backbone.

40. As a combat vessel such as a Corvette, as well as its Combat Suite, are complex integrated systems with long planned lifespans, typically 30 years or more, the LAN infrastructure is generally designed to have extensive spare capacity for the lifespan of the vessel or at least until its half-life refurbishment.

41. In this regard, the Deputy Project Officer: Project Sitron (DPOPS), Capt Guy Jamieson, reported in his "Briefing by SAN" recorded in the minutes of the Technical Committee Meeting No. 16 held on 6th July 2000 as follows :

"*DPOPS made an urgent request that during the development of the Combat Suite, cognisance be taken of the fact that the Patrol Corvette would probably serve the SAN for between 30 to 40 years.*

During this time, there existed a good possibility that it would "go to war" and that lives would therefore depend on it."

42. Chapter 4 of the *White Paper on The South African Defence Related Industries*, available on the government website, addresses the Strategically Essential Capabilities and Technologies for the SANDF, with emphasis on the retention of local capabilities, as follows :

"*STRATEGICALLY ESSENTIAL DEFENCE TECHNOLOGIES AND CAPABILITIES*

32. Taking into account the list of requirements as reflected in the Defence Review and current environmental realities and resource limitations, choices have had to be made and as a result five technologies and capabilities are identified. They are common to the mode of warfare of both advanced and underdeveloped countries and are also common across the four Arms of Service of the SANDF. The following are considered strategically essential:

32.1 Logistic support, repair and maintenance of equipment and systems.

32.2 Systems integration.

32.3 Command, Control and Communication systems.

32.4 Sensors, signal processing and data processing.

32.5 Combat systems software and support.

32.6 Simulation systems and war gaming."

43. Part of the Combat Suite requirements of the SAN was based on the Defence Review and resulting White Paper on Defence-Related Industries. What we eventually developed was in line with the requirements of the SANDF and SAN. Our Information Management System (IMS) development specifically embodied five of the six strategic capabilities specified, these being *maintenance of equipment and systems, systems integration, Command, Control and Communication, Sensors, signal processing and data processing* and *combat systems software and support*.

44. On this basis alone, I therefore find it inconceivable that the locally-developed IMS could be deselected in favour of a foreign product.

45. I established C²I² Systems in February 1992 and in early September of that year I was approached personally by Messrs Anton Jordaan and Pierre Meiring of Armscor's Command and Control Division, on behalf of the SAN, to find out whether I could assist in developing a new naval Combat Suite for the new frigates or Corvettes under Project Diodon.

46. Some months later we started getting contracts to develop the IMS as well as contribute to the design of the overall Combat Suite. Over the next eight years we got approximately R20 million for this purpose from the SAN via Armscor. This would equate to approximately R30 million at current values.

47. The very initial contracts in 1993 were under Project Diodon. Between 1993 and 1995 we received contracts under Project Sitron and between 1995 and 1999 we received contracts under Project SUVECS.

48. When Project Sitron was deferred between 1995 and 1997 while the Defence Review was undertaken, the DoD changed the name of the Combat Suite portion thereof to Project SUVECS, this being an acronym for **Su**rface **Ve**ssel **C**ombat **S**uite.

49. Although Project Sitron was deferred until completion of the Defence Review and the resulting SANDF Force Design, the SAN considered a local surface Combat Suite capability as of strategic importance. Therefore Project SUVECS was funded to an extent of some hundreds of millions of Rands during the period 1995 to 2000.

50. In fact, due to this deferment, the Defence Command Council (DCC) approved the consolidation and transfer of funds allocated to Project Sitron, as well as additional funds, to a technology fund under Project SUVECS for the continuation of the Combat Suite development. Here I refer to the Project Memorandum dated 18th August 1995 from Mr Pierre Meiring, the Acting Senior Manager of the Command and Control Division of Armscor to the entire project team, entitled *Project Sitron: Combat Suite Funding Situation*.

51. Project SUVECS was run as a formal **acquisition** programme. It had all the formalities of a **cardinal** acquisition programme, including an approved Staff Target, i.e. the *Naval Staff Requirement* and an Acquisition Plan, both mandatory baseline documents for any SANDF cardinal acquisition programme as prescribed in RSA-MIL-STD-003. One of these requirements is an Acquisition Plan. In this case the Acquisition Plan was called the *Programme Plan: Sitron Combat Suite*.

52. In addition, Project SUVECS also had an extensive set of mandatory project standards and specifications, a formal risk management regime, a *Test and Evaluation Master Plan* including the requirement for formal baseline and design reviews, an *Integrated Logistic Support Plan*, etc. Many of these baseline documents were Level 5 or Vessel-level documents, i.e. pertaining to the Corvette as a whole and not just to the Combat Suite at Level 4.

53. Project SUVECS also had regular technical and project progress meetings at sub-system, Combat Suite and Vessel levels, involving the SAN, the DoD, Armscor and all the contracted companies.

54. None or few of these formalities would normally be applicable to a technology retention programme which was the way Project SUVECS was, in my view, incorrectly described by during the SCOPA hearings of 11th October 2000. It was developed under the guise of a technology retention programme in order to continue to receive funding.

55. The *Programme Plan* was approved by the Programme Manager for the Combat Suite, then Mr Pierre Meiring of Armscor, the Programme Manager for the Corvette, then Mr Byrall Smith of Armscor and then-Capt Johnny Kamerman, then Project Officer representing the SA Navy, but seconded to the Directorate: Acquisition and Projects Division (DAPD) of the Department of Defence. Capt Kamerman has since been promoted to Rear Admiral (JG) and to Project Director. Thus the *Programme Plan* was fully approved on 17th April 1996 (date of last signature) and authorised for use on Project Sitron, i.e. the Corvette Combat Suite acquisition programme.

56. The *Programme Plan* specified the IMS for use within the Corvette Combat Suite by means of a table on Page 14 entitled *Combat Suite Element List and Acronym Table* provided under the section entitled *Project Definition* and the paragraph entitled *System Composition*, as well as on Page 52 in a diagram entitled *Project Sitron : Combat Suite Functional Organigram*.

57. What was required in terms of the early Project Sitron and Project SUVECS development was a Combat Suite architecture based on an *Information Management System* or IMS, a term which in this context is a proper noun which was coined by myself. Overall, the IMS was conceptualised by myself, but significant contributions were made at the system level by Mr Pierre Meiring of Armscor and Lt Cdr Jacques Pienaar of the SA Navy, with the more detailed levels being done by members of my company, C²I² Systems.

58. In addition to the technical development of the Combat Suite elements and overall architecture, an important objective of Project SUVECS was to develop a requirements specification for the Combat Suite. This was done as a team effort between the SA Navy, Armscor and industry members of the Design Advisory Committee (DAC).

59. Apart from the SA Navy and Armscor, this DAC consisted of about half a dozen members of the South African naval electronics industry, selected for their specific areas of expertise. I was on this team with my area of responsibility being the Integration Segment, which included the Combat Suite data networks and related matters.

60. The result in the specification, called *Combat Suite Functional Specification for Project 'S'* was also approved by the SA Navy and Armscor and was a baseline requirements document under formal configuration control as prescribed in the *Programme Plan*.

61. The *Functional Specification* and the accompanying *Combat Suite System Design Document for Project 'S'* (SDD) also specified and prescribed the IMS for use within the Corvette Combat Suite.

62. Thus we, the South African defence industry, were developing an indigenous Combat Suite for Project Sitron under what became an interim acquisition project called Project SUVECS.

63. I believe that this factual inaccuracy had the effect of causing SCOPA and the other investigators to believe that the IMS was merely part of ADS's scope of supply and that therefore ADS were at liberty to do whatever they wanted within their own sub-system.

Development on "Risk"

64. Due to the deferment of Project Sitron, funding of the Combat Suite by the SA Navy was never sufficient for fullscale development. In addition, funding and contracting was approved only on a year-by-year basis. Contracts were meant to be completed by March of each financial year with the follow-on contract commencing some months later. Invariably, there were moratoriums placed by the DoD on contract placement with this often occurring much later in the year, even the next year. This made it extremely difficult for all companies involved in the development of the Combat Suite to proceed at a steady and sufficient pace in to order meet the required timescales being conveyed to them by the Project Officer or his representative at each and every Technical Committee meeting.

65. At numerous formal project meetings, as well as other occasions, The Project Officer (then-Capt Kamerman) and the Programme Manager (firstly Mr Pierre Meiring then Mr Frits Nortjé) explained very clearly to the participating companies that the only way that a South African-developed Combat Suite could be justified to be included within the Corvette was by good progress being made in respect of the development of the Combat Suite. They acknowledged that the only way that this could be accomplished was by the participating companies investing their own funds in their parts of the project. It was said on a number of occasions by both then-Capt Kamerman and Frits Nortjé that the sub-system project managers attending the various meetings, normally the Technical Committee (TC) meetings *"needed to take back this clear message to their management*". I personally attended all these meetings and I heard this said many times in one form or another.

66. At TC Meeting No. 10, held on 30th July 1997, POPS, then-Capt Kamerman, briefed the meeting as follows :

"*The impact of possible "package deals" was expected to be confined to those sub-systems being acquired from foreign suppliers.*"

67. At TC Meeting No. 11, held on 18th September 1997, PEPS:CS, Cdr Ian Egan-Fowler, briefed the meeting as follows :

"*The MOD's policy was recently reaffirmed by them. The terms, depending on timescales, for local acquisition definitely favour local industry over foreign acquisition of Combat Suite elements.*"

68. At TC Meeting No. 13, held on 9th July 1998, POPS, then-Capt Kamerman, briefed the meeting as follows :

"*The Combat Suite, as specified in the present baseline, has been included in all the offers received along with the financing of its acquisition.*"

"*POPS warned the meeting not to listen to rumours of alternative Combat Suites being considered as none have been offered for evaluation. The local (RSA) Combat Suite is an integral part of the mandatory local content (DIP) component of the "package deal".*"

69. POPS continues :

"*The SANDF's request for a loan from the Treasury was turned down. This had resulted in the current moratorium we find ourselves in. Suvecs will be "funded" by delaying contractual payments until the 1999 financial year. There is, however, a small pool of money to assist those contractors who cannot survive another year of zero cashflow."* (ADS's inverted commas).

70. The Armscor Programme Manager for the Combat Suite (APMS:CS), then Mr Frits Nortjé of Armscor, who has now been promoted to Armscor Programme Manager for the Corvette (APMS), contributed to the briefing as follows :

"*APMS:CS supported this statement by stating that the State cannot support local industry completely for the next two financial years.*"

71. I believe that it was clear to those at the meeting that what was meant by this statement was that contractors who wanted to ensure retention of their equipment in the technical baseline were expected to fund their projects during the period of contract moratoriums.

72. The minutes of TC Meeting No. 13 (classified as Confidential) state :

"*He* (Mr Nortjé) *went on to say that the State may not, and will not, insist on any contractor working on risk during this period*".

What was actually said on occasions such as these was that the State could not guarantee that a contractor who took such risks would eventually receive a contract because they could not guarantee that the Corvette programme would eventually materialise. However, it was said that if and when the Corvette acquisition was finally approved, then those contractors who had taken the risk in developing their elements would be guaranteed their parts of the contract.

73. At Design Review 2.1, which started on 9th March 1998, POPS, then-Capt Kamerman, stated the following as recorded in the *Minutes of the Combat Suite Design Review 2.1 for Project S* dated on 28th March 1998 :

"*The successes to date of Suvecs were noted as having exceeded all bounds of expectation given the trickle funding to which it had been constrained.*"

74. Furthermore, the situation for most of the contractors was such that they could not easily suspend development during periods when formal contracts were absent. The contracts were on a yearly basis and invariably these contracts were placed very late in the calendar year and had to be completed by the end of Armscor's financial year, i.e. March.

75. Development teams had been set up at significant expense to the contracting companies and could not be allocated, de-allocated and then re-allocated according to the contracting situation. Thus contractors had to, and were expected to, take these "risks" (*risks* in inverted commas) in order to make a sufficient amount of technical progress towards an acceptable level of completion of their elements.

76. In fact, before Frits Nortjé was Programme Manager, Pierre Meiring, now Senior Manager of Armscor's Command and Control Division, was Programme Manager of the Corvette Combat Suite. On 6th February 1995, he issued a Project Memorandum to all participating companies, including ourselves, where he stated :

"*contractors should understand that this matter is one of urgency and the sooner* (interim development) *contracts are placed the sooner your participation* (in) *the programme* ***will be assured***" (my bold emphasis).

77. Now we as C²I² Systems had fulfilled all of the conditions set by the SA Navy and Armscor to secure our participation. We had timeously responded to all Requests for Quotation and completed, to the entire satisfaction of the programme, all of the contractual and technical requirements. We endured extremely harsh cashflow and financial conditions, at the same time contributing extensively our own funds to meeting not only the interim programme requirements, but also ensuring that the IMS was

very well advanced in terms of development compared to the rest of the Combat Suite elements by the time the Corvette acquisition was finally approved. It is normal practice in systems development for the interconnectivity elements to take the lead in terms of timescales; i.e. this is done so that system integration risks are reduced as far as possible by means of prior development in these areas.

78. As to our own position regarding risk-based development, I wish to record my statement in this regard made in my letter to Mr Pierre Meiring, the Programme Manager for the Corvette Combat Suite, dated 15th March 1995 and copied to Capt J.E.G. Kamerman, POPS, SAN NHQ and Lt Cdr J.J. Pienaar, PEPS:CS :

"*While we realise that there is **some** risk in proceeding with development before contracts are formally placed, this risk should only be if the programme is cancelled or delayed and in **no other way**.*

We have received a number of faxed memoranda from Armscor urging us to maintain maximum progress with the projects and we can assure you that we are following these requests to our fullest ability. In the same spirit, we expect the fullest return on our investment in both our IMS and Radar Console endeavours." (bold emphasis in the original letter).

History - Acquisition of the Corvette Combat Suite

79. Once the acquisition of Corvettes under Project Sitron was approved in principle by the government, the DoD, through Armscor, on 23rd September 1997 formally issued a *Request for Information* (RFI) to the countries interested in bidding for the Corvettes. The RFI included a sub-document entitled *SA Navy Patrol Corvette Combat Suite Element Costing and Description, Issue No. 2* (classified as Restricted), dated 30th September, 1997 (classified as Restricted). Responses to this RFI were required by 31st October 1997.

80. Once the short-list of four potential suppliers for the Corvettes under Project Sitron was approved by the government by 8th December 1997, the DoD, through Armscor, formally issued on 13th February 1998 a *Request for Offer* (RFO) (classified as Confidential) to the short-listed countries bidding for the Corvettes. The RFO included the *Element Costing and Description* which was approved for use on Project Sitron by then-Capt Kamerman on behalf of the Chief of the SA Navy on 28th January, 1998(Annexure Axx).

81. Although I was not on the official distribution list the document *Element Costing and Description* was faxed to me personally by the Project Officer, then-Capt Kamerman, on 26th March 1998. In fact, his office's fax number appears on it. The fax was also sent with a Project Sitron cover page and some handwritten notes from the Project Officer. Capt Kamerman did this because he wanted to re-assure me that our company's IMS was part of the SAN's official requirements and tender baseline and that ADS could under no circumstances exclude us from the programme. The reason he wanted to give me such re-assurance was that I had expressed concern to him that ADS was attempting to change the Combat Suite architecture, without regard to formal baseline management and thereby exclude the IMS from the baseline.

82. This document makes it clear that certain companies were **nominated** as suppliers for the various specified sub-systems of the Corvette Combat Suite. In this regard, I refer to Paragraph 3 on Page 3 of the document, which reads as follows :

"*It is intended that the Vessels will be acquired under a single prime contract from a Vessel Contractor, the ship platforms being built overseas and integrated with their Combat Suites in the facilities of the SA Naval Dockyard, Simon's Town, with the deliverables being complete vessels post Sea Acceptance Trials, plus logistic support. The Vessel Contractor will be a teaming arrangement between the ship platform supplier and the* ***nominated*** *RSA Combat Suite supplier, with sub-contracts placed on* ***nominated*** *companies for the various sub-systems.*" (my bold emphasis).

83. I also wish to draw attention to the Combat Suite element description in Paragraph 9 on Page 6 of the document, which reads as follows :

"*Description. The Patrol Corvette Combat Suite is a modern, LAN-based naval combat system with a distributed processing architecture, making extensive use of commercial off-the-shelf (COTS) technology. Processing is Intel based with Multibus II interfacing, the language used being mainly ADA with C++ in certain applications. The Combat Suite consists mainly of sub-systems developed or under development by South African industry, in addition to some items of equipment from the SA Navy Inventory; and three major sub-systems to be acquired from foreign suppliers. The Combat Suite will be fully integrated in a shore Integration Test Bed (ITB) in Simon's Town prior to onboard installation.*"

84. The *Element Costing and Description* provides a diagram entitled *SA Navy Patrol Corvette Combat Suite Element Product Breakdown Structure*. This clearly identifies the Information Management System as a required element under the Integration Segment, i.e. a Level 3 sub-system.

85. The *Element Costing and Description* also provides a table entitled *SA Navy Patrol Corvette: Nominated Combat Suite* which identifies the Information Management System, with its acronym IMS, as an element under the Integration Segment and C^2I^2 Systems as being the "*Element Supplier*". It describes the IMS as follows :

"*Dual redundant fibre optic (FDDI) local area network (LAN) databus and LAN management for the distribution of all non-video data information. Includes FDDI Network Interface Cards (NIC) to interface non-IFU sub-systems.*"

ADS's Alteration of the Baseline

86. The *Element Costing and Description* describes the Combat Management System (CMS) as consisting of the Action Information System (AIS) and Weapon Control System (WCS) with ADS as being the "*Element Supplier*".

87. I believe that herein lies the origin of ADS's and Thomson-CSF's irregular departure from the Combat Suite technical baseline. The AIS and WCS had been derived from the SA Navy Strike Craft's AIS and Target Designation Assembly (TDA) sub-systems, originally developed under Project Caliban and further developed under Project SUVECS. When Thomson-CSF started their acquisition of ADS, they wanted their own Combat Management System, called *Tavitac*, to replace the indigenous AIS and WCS that had been baselined for Project Sitron. In order to facilitate this without major changes to the Tavitac CMS, ADS and Thomson-CSF also had to alter the whole Combat System architecture which had been based on the IMS.

88. At the end of the TC Meeting No. 13, held on 9th July 1998, the ADS Combat Suite management team gave an overhead presentation of an "*Alternative CMS Design*". Although ADS recorded the presentation as being presented "*after the meeting had been formally closed*", this was minuted within the minutes of TC Meeting No. 13. What ADS was presenting were effectively the implications on the Combat Suite baseline in consequence of their preference of Tavitac's CMS over the indigenous AIS and WCS. They presented a number of different architectures, including a number that excluded the IMS entirely (Reference CS3) and some that reduced it substantially (Reference CS5). All the new options were based on so-called risks to the Combat Suite, but, in fact, they were proposals for reducing ADS's risk and cost for their CMS at the expense of the already baselined and formally reviewed and accepted Combat Suite design and architecture. ADS also went about this in an entirely unannounced fashion; it having been a rule at all Combat Suite meetings that no new matters could be addressed at any meeting without full prior notification in writing of the parties affected.

89. Nevertheless, the JPT, represented by DoD, SAN and Armscor allowed ADS to proceed with their presentation. In fact, I remember it being stated by then-Capt Kamerman that ADS's senior management had briefed the JPT on this same matter prior to the TC meeting. However, they concluded the matter for the day by instructing ADS to "*quantify the impact of the proposed changes to the integration effort and to consolidate the response from the various Level 3 contractors.*". To my knowledge, this has never been done, at least not to the meeting participants as was instructed. I must emphasise that C^2I^2 Systems was consistently recognised as a Level 3 contractor.

90. The Navy and Armscor requested that members of the Technical Committee and especially the Design Advisory Committee respond to the proposal made by the ADS. I did so by means of a number of letters to the Project Officer, also copied to the rest of the Project Team. Three of these letters were entitled :

- *Corvette Combat Suite Architecture Baseline Changes - Observations on Lifecycle Risks* dated 9th April 1999.
- *Corvette Combat Suite - Observations to Proposed Changes* dated 31st May 1999.
- *Corvette Combat Suite - Warning on Proposed New Network Solution* dated 3rd August 1999.

91. To further the matter of alternative Combat Suite designs, the DoD convened two further meetings over the periods of 4th and 5th August as well as 20th and 21st August 1998 [dates are right move para]. The deliberations of these two sessions are minuted in one set of minutes entitled "*Minutes of the Ad Hoc CS Concept Design Review held at ADS Mount Edgecombe on 4 & 5 August and 20 & 21 August 1998*" (classified as Restricted). Cdr Ian Egan-Fowler signed the minutes as secretary and then-Capt

Kamerman signed them as chairman, both signatures being dated 10th September 1998. I attended all of these meetings.

92. POPS, then-Capt Kamerman, states the following in his opening remarks :

"*There is an existing baseline and must be adhered to as far as possible.*"

"*The NSR* (Naval Staff Requirement) *describes the CS as a bus based, open architecture system for future growth potential.*"

93. What resulted from the adoption of the Tavitac-based system is a **closed** architecture and a Combat Suite Data network which employs proprietary protocols and implementation and not commercial off-the-shelf (COTS) elements. This essentially means that the SAN is compelled to retain Thomson-CSF as their exclusive source of supply for this system. This is inconsistent with the statement made by Cdr Ian Egan-Fowler, the Combat Suite Project Engineer who, during the SUVECS Workgroup on Computing Segment Technology held at ADS on 4th November 1998, stated the following in relation to proposals of new architecture proposed by ADS :

"*SAN's main concern is the life cycle cost, not the acquisitions costs.*"

"*SAN needs to remain with what they know and currently cannot support any new ideas which cannot be identified as a lower risk.*".

94. Under Item 6 *General*, Sub-Item 15. k., it is minuted :

"*The conceptual model presented by DLB* (i.e. Doug Law-Brown, ADS's Corvette Combat Suite Programme Manager) *(CS7 mod1) was acceptable as a conceptually feasible option. - Action JK* (i.e. Johnny Kamerman)".

95. This option CS7(Mod1) was specifically chosen because it accommodated both ADS's Tavitac and C²I² Systems's IMS.

96. This option was again discussed at the TC Meeting No. 14 (minutes classified as Confidential), held on 5th November 1998, where PEPS:CS (i.e. Cdr Ian Egan-Fowler) stated the following under Item 9.1.1 "*Alternative CMS Design*" :

"*PEPS:CS provided the meeting with feedback on the report generated by SINC on the impact of the proposed new Combat Suite architecture, i.e. CS7 (Mod. 1). CS7 (Mod. 1) is the SANs preferred architecture with the following riders :*

a) The design to be optimised using a common fibre cable plant. SINC:A (i.e. Lewis Mathieson of Armscor) *has been tasked to investigate the feasability of this so that the bridge between the CMS and the deterministic bus can be removed.*"

97. Although the above is minuted under Item 9.1.1, the meeting actually commenced with this item with Cdr Egan-Fowler reading from a pre-prepared document. The minutes do not reflect the seriousness and gravity of the Navy's pronouncements on this matter. Having been at the meeting, I noted Cdr Egan-Fowler commencing as follows :

"*The Navy has seriously considered the alternative Combat Suite system design and has decided as follows :*

The specified architecture shall be CS7 (Mod 1) with the following riders :

There shall be a common fibre cable plant.

The ARTTS software interface layer of the Tavitac CMS shall be modified to use the IMS's APIS software interface layer."

[Slide - CS7 Mod 1 diagram]

98. Cdr Egan-Fowler continues :

"*It was re-iterated that ADS must provide a written description of CS7 (Mod. 1) as an urgent task. The description must highlight the changes from the Combat Suite DR2 "baseline"*" (ADS's inverted commas for "baseline").

99. To my knowledge, this was never been done. On the contrary, the option ultimately adopted after the deselection of the IMS was an architecture incompatible with the IMS, closer to that designated as CS3 in ADS's prior presentation.

100. In the circumstances, I find it strange that the documents provided by the DoD in defence of the de-selection of the IMS from the Combat Suite baseline, at around the time of the SCOPA meeting of 11th October 2000, was a diagram that designates the Corvette Combat Suite architecture as *cs7(mod1)*, a copy of which is attached hereto as Figure 1.

101. The IMS was specified in the *Programme Plan* and the *Functional Specification* as a Level 3 sub-system of the Combat Suite. This is a most important observation at this point because later in the Standing Committee on Public Accounts (SCOPA) hearings of 11th October, 2000 as well as in accompanying DoD documentation, the IMS is described by then-Capt Kamerman as a Level 2 sub-sub-system and a component of the Combat Management System. This is not in accordance with the documented project baseline for both Projects SUVECS and Sitron, namely the *Programme Plan* and the *Functional Specification*. I may add that both of these documents were signed by then-Capt Kamerman.

102. I also point out that the diagram cs7(mod1) correctly identifies the IMS as the interconnectivity element of the Combat Suite and not just the Combat Management System. Therefore the IMS is a Level 3 **product sub-system** and not a Level 2 **component** of the Combat Suite. This contradicts the diagram provided by the DoD to SCOPA entitled *The Acquisitions Systems Hierarchy*, which wrongly reflects the IMS as a Level 2 component. Equally wrong is the statement in the document which accompanied the hierarchy diagram, where the following was asserted :

"*The Information Management System (IMS) is a **Level 2 Component** of the CMS*" (their bold emphasis).

[Slide - Acquisitions Systems Hierarchy diagram]

The User Requirement Specification

103. Up until the end of the RFO stage of the Project Sitron tender process, i.e. when the preferred bidders for the Corvettes were approved by Cabinet on 18th November 1998, the Combat Suite had been specified by the *Functional Specification*, which had been authored, although not developed, by ADS and was under their own configuration control, including having an ADS document number. The SA Navy realised that it would be difficult, if not irregular in terms of RSA-MIL-STD-0003 *Acquisition Baseline Standards*, to motivate having one of ADS's documents as a fundamental baseline requirements document for a cardinal acquisition programme.

104. Therefore, for the contract negotiation phase of Project Sitron, i.e. until contracts were signed on 4th December 1999, the SAN set out their specific requirements in a document entitled *South African Navy Patrol Corvette Combat Suite Requirements Specification* (URS) (classified as Confidential). This specification was signed by the Project Officer - Project Sitron (POPS) on behalf of the Chief of the SA Navy and designated as "*approved for use on the programme.*"(Annexure Axx).

105. Initially the SAN issued the first formal version as Issue 1 on 10th December 1998. They re-issued the same document as Issue 2 on 5th March 1999 with some, mostly minor, changes.

106. In terms of RSA-MIL-STD-0003 *Acquisition Baseline Standards*, the URS is a mandatory baseline document for SANDF cardinal acquisition programmes. The URS specifies all the SA Navy's, functional and engineering requirements. Page 2, Paragraph a (ii), of the URS states that :

"*The Combat Suite component of the Vessel is the command, control, communications, navigation, sensor and effector systems specified in accordance with this specification and* ***selected by the SA Navy*** *(SAN). These comprise of systems developed and produced by* ***RSA industry****, Government furnished equipment supplied from the SAN inventory, and three systems to be acquired from overseas, viz: the primary search radar, anti-ship missile and hull-mounted sonar.*" (my bold emphasis).

107. The URS also specifies that :

"*The Corvette Combat Suite shall be a modern, LAN-based Naval Combat System with a distributed processing architecture making use of Commercial Off-the-Shelf Technology (COTS).*"

108. The URS specifies in some detail the requirements for a SAFENET-based, quad-redundant Information Management System (IMS). Pages 119 to 120, Paragraph 7.1.1, contain the following description of the Information Management System (IMS).

"*The Information Management System (IMS) shall interface all the Combat Suite (CS) segments via a Local Area Network derived MIL-STD-2204A, Survivable Adaptable Fibre Optic Embedded Network (SAFENET). The IMS shall be based on the Alternate Path Fibre Distributed Data Interface (APFDDI) topology as defined in the SAFENET standard. Refer to figure (strikeout)* ~~*below*~~ *7.1.3.*

The IMS shall provide reliable data communications between sub-system with enough spare capacity for CS expansion. This communication medium shall be transparent to the sub-systems and also provide synchronised clocks for the use in time-stamping of data. The IMS shall also assist in the maintenance of the Combat Suite. The Information Management System shall provide the following capabilities: a. Signal data transfer, b. Clock synchronisation, c. Bulk data transfer, d. Network Monitoring.".

109. In terms of Signal Data Transfer capability, the IMS was specified to shall have the following characteristics :

" a. Maximum latency of critical data transfer = 5 ms
b. Maximum message size = 4 000 bytes"

110. In terms of Clock Synchronisation capability, the IMS was specified to shall have the following characteristics :

" a. Synchronisation between any two internal IMS clocks < 250 μs
b. Maximum uncertainty between timestamps shall be better than 500 μs"

111. By comparison, ADS's document the *Combat Suite - System Timing Document for the SAN Patrol Corvette Program* (classified as Restricted) dated 15th August 2000, specifies minimum packet transfer time for the Detexis CSDB as 6,5 milliseconds for a 165 byte message(Reference).

112. This is very significant for the following reasons :
/

1. It does **not** meet the specified requirement of the URS.

2. Although this performance may suffice initially, there is little or no performance margin for upgradeability.

3. As C²I² Systems, we expended a very extensive effort in achieving the specification.

113. The Detexis CSDB also does not provide for Combat Suite synchronisation and message timestamping as specified in the URS. Again, :

1. It does **not** provide the capability specified in the URS. Detexis does not provide synchronisation or timestamping at all.

2. Although this capability deficiency can possibly be worked around initially, upgradeability will be severely curtailed.

3. As C²I² Systems, we expended a very extensive effort in achieving the specification.

114. In fact, the lack of this synchronisation and message timestamping has led to the employment of an extremely questionable method for the distribution of time-critical messages in the present Combat Suite design. Here the source of platform motion data has to provide a correction factor to the sampled data by modifying the data according to estimates of sampling time delay, rather than by timestamping the data with a synchronised timestamp. Effectively this means "polluting" the data at the source rather than filtering the data at the destination. This was a definite "no-no" in the previous system design, as is so in most distributed systems design practice.

115. The URS identifies in Figure 1-1, entitled *Document Hierarchy* on Page 15, that the *Program Plan* (or *Programme Plan*) is one of the **applicable** "*existing Combat Suite level documents*".

116. The URS further states on Page 15 that :

"*This document .... describes the segments and elements of the **required** Combat Suite.*" (my bold emphasis).

117. The URS states on Page 19 that :

"*The scope of the required Patrol Corvette Combat Suite shall consist of the systems and sub-systems described in this document.*"

118. The URS provides a note on Page 18 concerning the diagram on Page 22 that :

"*Figure 2-3 ....illustrates the requirement that the FDDI databus shall be the main communication medium for combat system data,* ***including*** *high speed deterministic data where required.*" (my bold emphasis).

119. The URS provides a diagram (Page 20) that provides a :

"*Combat Suite Segment and Element Product Breakdown Structure Required*".

This specifies the Information Management System as being part of the Integration Segment and designates, in the key provided within the same diagram, that the IMS is to be provided by a "*Local Industry Supplier*".

120. Appendix I of the URS is a "*List of Candidate Suppliers*" with C²I² Systems being specified as the one and only supplier for the Information Management System.

121. Appendix J of the URS is an "*Element Costing*". Although, I have not had sight of this appendix, I would imagine that it contains costing of the elements as derived from the contractors' inputs at the Price and Schedule Audit in May 1998. Any costing for the IMS included in this document would have emanated from C²I² Systems.

122. Thus the IMS that we designed, developed and tested conformed 100% with the descriptions provided in the *Element Costing and Description*, the *Functional Specification* and the URS.

Product versus Potential

123. During Capt Kamerman's evidence during the SCOPA hearings held on 11th October 2000, he referred to the DoD's assertion reported in the Auditor-General's special review that the :

"*Although the SA Navy preferred the technical potential offered by the local company, this was outweighed by prohibitive risk-driven cost implications as determined by the prime contractor*".

124. It was further said by Capt Kamerman and the Chief of Acquisition, Mr Shamin Shaikh, that C²I² Systems had the "**potential**" in respect of the IMS. I contend that the use and explanation of their use of the term "potential" is uninformed and out of context. We already had the IMS system; although it still needed to be fine-tuned and certain hardware portions of it manufactured, we nevertheless had a **product** and not merely a **potential**.

125. Capt Kamerman was asked whether he regarded the quoted statement as accurate. In response he incorrectly attempted to convey that the potential merely lay in the bus as a future technology and not in the IMS product which we had already developed.

126. In fact, I repeat the JPT's final conclusion made in their report of June 1999 :

"*Both Thomson and GFC recognise that the IMS is a superior **product**.*" (my bold emphasis).

127. By early 1999, the IMS was almost fully developed; we had started formal tests in March 1999 and by October 1999 all the critical and major functions of the IMS had been fully developed and tested according to the specified baseline. Here I refer to our *Software Test Report Review for the Information Management System Multibus II Integration Milestone 3*, dated 26th October 1999.

128. Regarding the IMS, we had at that time fully met, in all respects, the expectations of Armscor and SAN.

129. As I have stated, C²I² Systems's system complied 100% with the SAN's specified requirements. These had been formally baselined and reviewed at a formal programme design review called IMS DR2 in 1997 and accepted by Armscor, SAN and ADS. A year or so later, the IMS was accepted at the next higher level design review for the Combat Suite as a whole, called CS DR2.

130. The IMS had not yet been industrialised, of course, as this would and could only happen under full-scale production, which due to the very nature of the IMS and for obvious reasons, could only occur under an acquisition contract.

131. I therefore find it significant that in the documents provided by the DoD in defence of the de-selection of the IMS from the Combat Suite baseline, at around the time of the SCOPA meeting of 11th October 2000, state the following :

"*The C²I² Systems IMS is a technology demonstrator, not a product.*"

This is simply not true (although the IMS is not something one can walk into a networking store and purchase ex-stock, but then neither are any other components or elements of the Corvette Combat Suite).

132. I find it even more significant that in the explanatory documents provided by the DoD in SCOPA the following is stated :

"*C²I² Systems has explicitly acknowledged that further development is necessary to develop it to a product* (*See letter from C²I² Systems dated 29 July 1999).*"

A similar statement was made by the Mr Shamin Shaikh in his evidence before SCOPA. This entirely misrepresents the statements in my letter. My letter states that Option 1, the **preferred** option, is "*to revert to CS7 Mod 1*". There are no extra costs involved. This option was entirely in accordance with the SAN requirements according to which we had developed the IMS over a number of years.

Option 2 of my proposal for a risk sharing approach and which calls for requiring an amount of R15 million, is explicitly in regard of :

"*completion of the IMS 100% according to the present IMS specification, but modified by agreement of both ADS and C²I² Systems to reflect the current reality of the Combat Suite.*"

133. This "*reality*", as I was attempting to politely describe the situation at the time, was brought about by aspects of the systems design introduced by ADS themselves and included belated baseline changes such as :

- changing from the use of the Multibus II standard to ADS's new requirement of using the VME and/or Industrial PC standards

- ADS's requirement for provision of the TCP/IP protocol, but specifically operating under our APIS protocol.

134. Such "realities" would have required us to purchase some millions of Rands of new hardware on which to redo the development and testing which we already completed under Project SUVECS.

135. However, even if these were valid new requirements being introduced by the DoD and/or ADS, these certainly in no way invalidated any of the work or achievements made on the IMS.

136. It is important to note that it has been asserted during the SCOPA hearings of 11th October 2000 by the Chief of Acquisitions, Mr Shamin Shaikh that the IMS was a "*unique technology*" and " *that in fact it is a technology and not a product*".

137. This statement misrepresents the true facts. The IMS consists almost entirely of an integrated set of commercial off-the shelf **products**, the most important of these being according to the FDDI standard. The IMS also conforms to US Navy standards, as specified by the SA Navy, the most important of these being the SAFENET standard (MIL-STD-2204A), which also in turn specifies FDDI. The only aspect of the IMS that is in any way unique is the APIS (Application Interface Services) application programming interface (API). APIs are almost invariably specific for particular real-time systems. The IMS's APIS API is an extremely small part of the overall IMS system and was in any case specified by the SA Navy and Armscor. In addition, the IMS offered an alternative to the APIS API, this being the TCP/IP standard which is a universal standard on which the entire Internet is based. In the IMS project documentation, this option is referred to as the *dual protocol stack.*

138. This alternative *dual protocol stack* had always been proposed by me in order to provide greater flexibility in terms of interfacing options to the IMS. However, the SAN and Armscor had always rejected this as they wanted strict adherence to the programme standards. When ADS decided to drop the AIS and WCS in favour of Thomson's Tavitac CMS, they requested that we provide this TCP/IP option. We responded positively to this by providing a quotation to include TCP/IP and the dual protocol stack. We even provided them with software and hardware which allowed them to get some of their systems communicating over TCP/IP and our IMS FDDI hardware in a matter of a few days without any assistance from us.

139. Thus the IMS was developed according to US Navy and SA Navy standards, using COTS technology and components, including the SAN's specified Multibus II processor standards. In fact, only the use of this Multibus II standard and the use of APIS make the IMS any different from similar "IMS"-type systems used for many years (since the early 1980s) on US Navy, Royal Navy and German Navy ships, as well as many other mission-critical military applications.

140. Examples of such early installations onboard US Navy include the *USS Norton Sound* in 1983, the *USS Valley Forge* in 1984 and the *USS Mobile Bay* in 1987. All these vessels are naval surface combatants such as destroyers, frigates or corvettes.

141. The custom-designed layer of communication protocol software, which we called APIS (an acronym for Application Interface Services), although unique, was specified to us by the SAN and Armscor. APIS is actually merely an implementation of an Application Programming Interface (API) which all data communication systems have to have in some form or another. SAN and Armscor instructed us to conceptualise an API which facilitated a robust, consistent, simple and transparent interface between the Combat Suite sub-systems and the IMS and each other. This is precisely what we did, using a standard communication software concept known as Message-Oriented Middleware.

142. Any assertion that the IMS was a novel, immature and high-risk technology is simply wrong.

143. In fact, the IMS was to all intents and purposes a modern, fully developed and tested system, designed 100% in accordance with the SAN's specifications.

144. The DoD's argument that the IMS has "*not (been) operationally tested or fielded in any warship to date*" is a post hoc fallacy; the true position is that the IMS was developed for the SA Navy's Corvettes. The IMS could not be tested onboard a warship until the Corvette warship had been built.

145. The fact that the IMS has not been tested onboard a warship before does not mean that it represents a risk to the SA Navy as it would in any case be subject to an already baselined comprehensive qualification process documented under a SA Navy-approved *Test and Evaluation Master Plan*, both at the sub-system (IMS) and system (Combat Suite) levels.

146. I had already made the proposal that a Strike Craft be used as a more realistic test platform, specifically for the interaction of sensors and weapons via the IMS. However, the SA Navy considered this unnecessary.

147. A very high proportion of this formal testing had already been successfully completed by the time assertions of risk concerning the IMS were made by ADS in mid-1999.

148. This testing of the IMS to which I refer above was performed during the period March 1999 to October 1999. It was performed in a formal way and witnessed and accepted by Armscor's Quality Assurance, as well as SA Navy and Armscor representatives of the Corvette Joint Project Team and ADS.

149. The requirements of the Combat Suite in accordance with URS, a baseline the validity of which was acknowledged by the Project Officer in his testimony before SCOPA on 11th October 2000, are relevant as the SAN has actually now substantially diverged from these.

Sub-System Selections

150. As far as the Request for Final Offer is concerned, I wish to emphasize that it is stipulated in Paragraph 1.2 that :

"*It is envisaged that the Combat Suite contractor will be a South African industry consortium wherein Altech Defence Systems (ADS) plays a leading role, co-responsible for the overall design, integration and supply of the Combat Suite element.*"

151. Subsequently ADS was nominated as the preferred supplier for the entire Combat Suite, i.e. to integrate the whole Combat Suite. ADS, in effect, became the main contractor for the Combat Suite. They were nominated as such in the same document, namely the document entitled *Element Costing and Description*(Annexure Axx), as was C²I² Systems nominated to provide the IMS.

152. In this regard, I refer to the appendix to this document, which shows ADS to be nominated for the combat system integration. In terms of the document, ADS's responsibility included contracting with the sub-contractors. In my view, the fact that ADS had to integrate the system, but could also be a sub-contractor competing with other sub-contractors, constituted a clear conflict of interest.

153. Also in the appendix to this document, a "*foreign supplier*" is nominated to provide the STAR Radar with C²I² Systems being co-nominated to provide the Radar Consoles with the foreign supplier. We were nominated in that we had entered into a "package" deal arrangement, for consoles for both the STAR Radar and Optronic Radar Tracker, with the SA Navy, Armscor and Reutech Radar Systems. We had also performed some technical work at "risk" on the STAR Radar Console.

154. On 27th March 1998, I wrote to the Managing Director of Altech Defence Systems, for the attention of Mr Pierre Moynot, confirming the situation, as it then was, as follows :

"*You will be aware that we are developing the Information Management System (IMS) and Tracker Radar Console (TRC) for the Combat Suite. We have also been designated as developing the Search Radar Console (SRC), with ADS supplying the console hardware, i.e. VMC, in respect of both the TRC and SRC. In addition we are the designated system house for the Platform Management System (PMS) which incorporates a number of sub-systems for the monitoring and control of ship platform machinery. These include sub-systems developed by ourselves, i. e. the Platform Management Console (PMC), Helicopter Control Sub-System (HCS) and Stability Management Sub-System (SMS), as well as sub-systems developed by other companies, including the Advanced Damage Control Sub-System (ADACOS) developed by ADS (Diep River).*"

155. My letter continues :

"*We have noted the SA Navy's and Armscor's officially expressed preference of having the Corvette Combat Suite supplied by a Combat Suite Contractor which "will be a South African industry consortium where Altech Defence Systems (ADS) play a leading role, co-responsible for the overall design, integration and supply of the Combat Suite element*".

156. I accordingly stated that :

"*We are approaching yourselves with a view to participating in this teaming arrangement*". (Annexure Axx).

157. The STAR Radar contract was eventually allocated to Thomson-CSF with the consoles being provided by ADS.

158. In early August 1998 in response to my letter to ADS on the recommendation of the Project Officer, then-Capt Kamerman, discussions between C²I² Systems and ADS took place, in an attempt to conclude a Memorandum of Understanding (MOU) regarding co-operation on the Corvette Combat Suite.

159. This MOU was drafted by ADS and transmitted to me as an email attachment on 28th August 1998 by Mr Duncan Hiles, then Managing Director of ADS. I responded to this letter almost immediately by means my letter of 3rd September, 1998. I need to point out that in the draft, in the first paragraph of the preamble on Page 2 of the document, the following is stated :

"*ADS has been **nominated** by the SA Navy as the supplier of the Command Management Sub-System and the Navigation Sub-System. Within the Integration Segment, C²I² Systems has been **nominated** as the supplier of the Information Management Sub-System (IMS). These **nominations** are recorded in Annexure I.*" (my bold emphasis).

160. This clearly shows that ADS also acknowledged C²I² Systems as the **nominated** supplier of the IMS.

161. I could not accept ADS's wording of the MOU *inter alia* because Paragraph 3 would have given ADS carte blanche to change the specifications of the system and because of ADS's demand for exclusivity i.e. ADS's demand that C²I² Systems not supply the IMS to any party other than to ADS for the SAN Patrol Corvettes.

162. I was not at that stage prepared to grant exclusivity in accordance with ADS's demand as I was not certain that ADS would retain their status as the nominated supplier of the Combat Suite Integrator. ADS's preferred status was based on the fact that it was a local company. By this stage I was aware that Thomson-CSF of France had purchased 50% of ADS from the Altech Group and I was concerned that ADS would lose its preferred status. I wanted to be free to offer our IMS to other potential Combat Suite Main Contractors.

163. I am of the opinion that the phased purchase of the ADS shares allowed the exclusivity of ADS's nomination as supplier of the Combat Suite to endure during the negotiation process. I contend that this exclusivity would have been negated and no longer justifiable had there not been this phased process.

164. I also knew that the only reason that ADS, ourselves and the other companies could justifiably be nominated *a priori* as suppliers of Combat Suite was the fact that we were all **South African** companies who had participated and invested in the local development of the indigenous Combat Suite for many years.

165. In fact, other foreign companies such as BAeSEMA of the UK, CelsiusTech of Sweden and STN Atlas of Germany, three of the traditional European suppliers of naval combat systems to Blohm+Voss, were also monitoring this developing situation with Thomson-CSF and ADS and had indicated that they were interested in competing with ADS should it lose its exclusivity as a result of its takeover by a foreign owner. In turn, these companies had approached us informally in order to determine whether we would supply our IMS to them should they successfully bid on the supply of the Combat Suite.

166. In this regard, in April 1997, Mr Lewis Mathieson of Armscor, now the Combat Suite Programme Manager, but then the Armscor Manager responsible for the IMS, instructed us to provide various documents describing the IMS to BAeSEMA. The obvious reason for this was that BAeSEMA had expressed an interest to the DoD, the SA Navy and to Armscor in tendering for the Combat Suite and/or Combat Management Segment. In fact, I know that various very senior managers and directors of BAeSEMA and British Aerospace (BAe) met with senior members of the DoD, the SA Navy and Armscor in this regard.

167. From British Aerospace, these persons included Alex Dorian, Managing Director, Alan Nicholson-Florence, Marketing Director and Chris Courtaux, Business Development Director. It is known that they met, inter alia, with Rear Admiral Howell and Pierre Meiring of Armscor and I think quite a number of others. It is interesting to note that Alex Dorian's services with British Aerospace were terminated a few months after this and that he has since been the Vice President of Naval Systems for Thomson-CSF, based in Paris.

168. I was also told by a director of British Aerospace that they had meetings with Schabir Shaikh of Nkobi Holdings with regard to provision of the Corvette Combat Suites, as well as them, i.e. BAe, expressing an interest in an equity stake in Altech Defence Systems.

169. As we were a South African company that had been nominated to supply the IMS and because the development of the IMS was already nearly complete, there was thus no way that I was prepared to accept exclusivity of supply to ADS, who could easily lose their own exclusivity if they were to be purchased by a foreign company, thereby excluding ourselves.

170. Accordingly, I responded to ADS's draft MOU such that the MOU would become effective once ADS was appointed as the Main Contractor for the Combat Suite.

171. ADS refused to accept this and therefore C²I² Systems and ADS never signed this MOU.

172. On 23rd August 1998 ADS and on 28th August 1998, C²I² Systems did, however, sign an *Exchange of Proprietary Information and Non-disclosure Agreement*, in terms of which ADS was not entitled to disclose any of our technical information or our price(Annexure Axx).

173. Regarding the interest of other combat system suppliers, we were formally approached by BAeSEMA in early November 1998 with a *Letter of Intent* (LOI) regarding the supply of elements of the Combat Suite should they be successful in persuading the German Frigate Consortium to consider them as a potential supplier. This draft of the LOI called for complete exclusivity of supply to BAeSEMA. Due to the nature of the prevailing situation regarding the nominations for the elements of the Combat Suite, we refused to offer such exclusivity to BAeSEMA.

174. The situation concerning BAeSEMA and ASM was clearly conveyed to the SA Navy and the DoD by means of briefings and letters and telephonic conversations to and with, inter alia, Rear Admiral Howell, then-Capt Kamerman and Cdr Ian Egan-Fowler.

175. During one such telephonic conversation with Capt Kamerman , he made the ominous remark, quoting Group Captain "Bomber" Harris of the Royal Air Force, "*he who sows the wind will reap the whirlwind*".

176. As it transpired, BAeSEMA, through Advanced Systems Management (ASM), received a Request for Quotation (RFQ)(Annexure Axx) for the Command and Control System, a segment of the Combat Suite, from the GFC on 22nd December 1998. Although they put in some effort in preparing a quotation during the next three weeks or so, they decided on 14th January 1999 to withdraw from the bid to Blohm+Voss after having "*reviewed the competitive position*"(Annexure Axx).

177. I have subsequently been informed by very senior members of management of BAe Defence Systems Group, including a managing director of one of the companies in this group, that the reason for their withdrawal from their bid was that there was intervention from very high levels of the South African Government who advised them to withdraw or that British Aerospace would jeopardise their chances of winning the Lead-In Fighter Trainer (LIFT) and Advanced Light Fighter Aircraft (ALFA) contracts with BAe's Hawk and Gripen fighter aircraft for the SAAF.

Requests for Quotation and Price Audits

178. On 11th November 1998, we were requested by ADS to provide them with a formal quotation for the IMS. In Annex 1 *Scope of Supply*, the RFQ specifically notes the following :

"*The subsystem* [IMS] *is as established at the level 4 DR2* [Combat Suite Design Review 2] *under Project Suvecs and as modified by the selection of the CS7 (Mod 1) architecture at the last Technical Committee meeting (TC 14).*"

179. At this stage, we had to supply full technical details and pricing information to ADS. So effectively we were giving them the heart and soul of our system, but we did it under the *Non-Disclosure Agreement*.

180. On 15th December 1998, we were requested by ADS to provide them with another formal quotation for the IMS to "*accommodate an alternative configuration proposal*".

181. Details of this alternative configuration proposal were not provided. However the RFQ instructs us to "*Exclude/Remove the Bridge (BIFU)*" and "*assume a single dual redundant FDDI LAN*" and to "*provide a connection oriented service, ie as per UDP/IP and TCP/IP*" (i.e. the dual protocol stack). Thus it appeared to us that ADS was reverting to the original requirements as specified by the *Functional Specification* and more recently by the URS.

182. Regarding the various prices that we offered for the IMS, these were always in line with the prices which we provided the JPT at the yearly audits, including such audits in April 1997 and May 1998, as well as at the IMS pricing review held in March 1999. I use the term "*in line*" because the technical baselines and scope of supply for the various requests for quotation given to us, invariably changed from instance to instance.

183. During the SCOPA hearings of 11th October 2000, then-Capt Kamerman was questioned on the matter of price audits for the Combat Suite. Inter alia, he states :

"*I think you may be referring to the budgetary estimate audits that were carried out on the Technology Retention Programme.*"

"*They were not in any way audits.*"

"*When those budgetary estimate activities were carried out they were done significantly preceding any tender process for these Corvettes. In fact, it was approximately a year before we had.*".

184. Capt Kamerman's responses to the simple question of price audits undertaken by the Corvette Project Officer, i.e. himself, were incorrect. The true facts of the matter are that comprehensive Price and Risk Audits for the Corvette Combat Suite were undertaken in 1997 and 1998. These Price and Risk Audits, even during the currency of Project SUVECS, were specifically in the context of the Corvette Acquisition programme, not the Technology Retention Programme. I contend that price and risk audits of such a nature were and are irrelevant for a Technology Retention Programme - by definition. Nevertheless, the last audit carried out under the description *Corvette Combat Suite Price and Risk Audit* was in May 1998. The Corvette Request for Offer (RFO) was issued on 13th February 1998 with Offers required by 11th to 15th May 1998. Thus for Capt Kamerman to state that these audits were "*approximately a year before we had*", i.e. initiated the tender process for the corvettes, is simply not correct.

185. Furthermore, in March 1999, I was summoned to Pretoria by the Joint Project Team (JPT), consisting of members of the SAN seconded to the DoD and members of Armscor. At the meeting held at

Armscor, they were flanked by members of the German Frigate Consortium (GFC), Thomson-CSF and ADS. The manner in which I had to present and confirm the prices which we had supplied to ADS was to all intents and purposes another price and risk audit.

186. I thus reject the Project Officer's denials of the existence of these pricings in his evidence before SCOPA on 11th October 2000.

System Management Sub-System (SMS)

187. At this point, I need to mention that on 13th April 1999 we were also requested to submit a competitive offer for another two sub-systems to the Joint Project Team through Blohm+Voss, a member of the German Frigate Consortium. This was in respect of the System Management System (SMS) and Navigation Distribution System (NDS) for the Corvette Combat Suite. We were eventually awarded the contract for the NDS. However, for the SMS, although our quote was less than that of ADS (even after unjustifiable upward adjustments to our price) ADS won the contract.

188. On 13th April 1999 the JPT acting with the German Frigate Consortium (GFC) as interlocutor, formally requested a *"competitive/comparative quote"* from both C²I² Systems ADS in respect of each of the SMS and the Navigation Distribution Sub-System (NDSS) for the Combat Suite of Project Sitron. It was specified that these quotations be submitted by 15th April 1999. Annexed to each of the Requests for Quotation was a Statement of Work relevant to the particular sub-system(Annexure Bxx).

189. I draw attention to the fact that C²I² Systems was given **two days** in which to respond to these two requests for quotation. Given the fact that we had not previously worked on either of these sub-systems and were competing against the previously nominated contractor (ADS) who had prepared two previous quotations in March and early April 1999, I aver that the time afforded to the C²I² Systems was manifestly and grossly unreasonable.

190. At the time of the request for quotation, the situation was complicated by the fact that both the technical director of C²I² Systems Gerhard Krüger and I were overseas and unable to gain an overall perspective of these Combat Suite elements. Nevertheless, C²I² Systems managed to submit a competitive quote, Quotation No. CCII/PROP/054, Issue 1.0 dated 15th April 1999, within the prescribed period. The quote was faxed to the GFC on 15th April 1999(Annexure Bxx).

191. Subsequently the SA Navy, by means of their letter dated 6th May 1999 had indicated that an acceptable price for the total Combat Suite had not been achieved by the negotiating process and that it had accordingly requested a Best and Final Offer (BAFO) for the Corvette Combat Suite, including the SMS and NDSS.

192. On 12th May 1999, ADS issued a Request for Best and Final Offer to C²I² Systems for the NDSS, thereby indicating that the JPT had a preference for the NDSS to being provided by C²I² Systems, but not for the SMS.

193. In preparing a BAFO for the NDSS, unlike in the case of the initial quotation, we were able to gain an overall perspective of the project and realised that we could offer four alternative and more affordable options. These options were dependant on whether the SMS and NDSS were contracted separately or together and whether ADS's Versatile Modular Console (VMC) or C²I² Systems's own console was used for the SMS. On the 20th May 1999, C²I² Systems submitted a second offer, Quotation No. CCII/PROP/054, Issue 2.0 dated 20 May 1999(Annexure Bxx).

194. In the case of the NDSS, ADS had in the meanwhile increased the scope of work of the order by including the necessity of providing a Navigation Sensor Sub-System Simulator (NSS Simulator). As there was no description or specification for this item, C²I² Systems had to make a nominal provision of R500 000 therefore and accordingly increase the price in the BAFO by this amount.

195. Although I am aware that the second offer in respect of the SMS was not submitted within the prescribed period, the GFC had nevertheless requested in their request for quotation that the validity period for C²I² Systems' quotation (for NDSS only or SMS and NDSS) to be until 13th December 1999. It is also relevant to mention here that the NDSS contract was only awarded to C²I² Systems by ADS one year later in June 2000 after extensive contractual negotiations with ADS and that this long delay

certainly indicates that the JPT and the German Frigate Consortium had the requisite time in which to consider our second offer.

196. In a telefax dated 29th June 1999 addressed by the Chief Executive Offer of Armscor, Llewellyn Swan to the GFC it was recorded that at a recent meeting of the Project Control Board regarding the selection of the major products and their suppliers for the corvette programme, those suppliers whose names appeared on the attached list were selected. The telefax requested that the GFC inform all suppliers of the PCB's decision. The second page of the telefax lists the suppliers in respect of the Combat Suite with ADS / Thomson being selected as the supplier of the SMS. I did not have sight of this document at the time.

197. On 2nd August 1999, as C²I² Systems had not yet received any formal notification as to whether or not it had been selected to supply the SMS, I addressed a letter to Klaus-J. Muller of the German Frigate Consortium, requesting to be formally advised as to the selection of the SMS and that "should our quotation not have been successful, please advise us fully as the reasons therefore"(Annexure Bxx).

198. I received no response to the aforementioned letter and therefore on 23rd August 1999 I addressed a second letter to Klaus-J. Muller of the GFC where I reminded them that at the meeting held at Armscor on 21st July 1999 the GFC had advised the attendees that it had instructed ADS to inform companies involved in the Corvette Combat Suite of the outcome of the Project Control Board's decisions and that ADS had undertaken to do so "*within one week'* of that time and that such formal notification had still not been forthcoming(Annexure Bxx).

199. On 1st September 1999 I received a response in the form of a telefax from the Corvette Consortium of South Africa (CCSA), which consisted of GFC, Thomson and ADS, stating that *"your offer of 15th April 1999 was taken for (sic) the decision of the client for the selection of the SMS"* and that C²I² Systems's tender had been unsuccessful. The telefax was signed by both Klaus-J Muller of the GFC and Pierre Moynot of ADS(Annexure Bxx).

200. On 13th September 1999 Herold, Gie and Broadhead (HGB), acting on the instructions of C²I² Systems, addressed a letter of demand to both Klaus-J. Muller and Pierre Moynot of the Corvette Consortium of South Africa requesting written reasons explaining why C²I² Systems's tender was not accepted(Annexure Bxx).

201. I would like to draw attention to Paragraph 2 of HGB's letter dated 13th September 1999 which states :

> *"2. Our client notes that its tender was not accepted by the Department of Defence. Our client requires that your client furnishes our client in writing with full reasons why our client's tender was not accepted, to reach our offices not later than 20th September 1999, including but not limited to:*
>
> *2.1 the identity of the other tenderers;*
> *2.2 the prices tendered by the other tenderers;*
> *2.3 which tender was accepted;*
> *2.4 whether the winning tender was accepted by reason of price alone or if not, what factors were taken into account;*
> *2.5 what aspects of the winning tender were preferred above our client's tender*."

202. After further requests addressed by HGB to Klaus-J. Muller and Pierre Moynot of the Corvette Consortium of South Africa on 1st December 1999(Annexure Bxx) and 4th January 2000(Annexure Bxx), HGB eventually received a response from Pierre Moynot of ADS in the form of a telefax on the 14th January 2000(Annexure Bxx).

203. It is necessary and relevant to quote the entire contents of the telefax :

"Selection of System Management Sub-System (SMS)

Further to your various requests as to how the choice of the supplier for the SMS had been made and on which criteria, I would like to give you hereby the result of our investigation:

1. *The request for quotation had been issued by the Project Team (S.A.N. & Armscor) through the preferred Platform Supplier, namely the GFC, who at that time was the only official interlocutor of the Project Team.*

2. *Your client quotation has been forwarded directly to the Project Team by the GFC together with the one that we had submitted.*

The selection has taken place within the normal selection process conducted by the Project Team with the approval by the P.C.B., resulting in the letter addressed by Armscor's CEO to the GFC, dated June the 29th, 1999, which allocated this sub-system to our company.

The above can be easily checked by yourselves and/or your client.

Therefore we do not consider ourselves involved in any way in that selection process."

204. As can be seen from the aforementioned letter, all that Pierre Moynot does is to explain the procedure of how the choice of the supplier for the SMS was made. He completely fails to address our valid enquiry as to the selection criteria used for the SMS.

205. However, more importantly, Mr Moynot makes it quite clear that it was in fact the Department of Defence and Armscor, represented by the Joint Project Team and Project Control Board, who were entirely responsible and accountable for the tendering and selection process for the SMS.

206. Additionally, the telefax dated 14th January clearly demonstrates that ADS's responsibility to integrate the Combat Suite and its role as a main contractor competing with other sub-contractors constituted a conflict of interest. This issue is dealt with herein below.

207. As both the GFC and ADS had failed to satisfactorily answer my queries and had stated that the decision had been made by the Project Team with the Project Control Board's approval, I subsequently addressed a letter to RAdm (JG) O.J. van der Schÿf, the Director of Naval Acquisition of the Department of Defence on the 15th February 2000, requesting the following information :

"1. What were the competitors to the C²I² SMS?

2. Which company's equipment was selected in the place of the SMS?

3. What was the price of the C2I2 SMS as offered to the DoD?

4. What was the price of the selected SMS?

5. On what grounds was this selection made?"
(Annexure Bxx).

208. As I received no reply from the DoD, I subsequently addressed letters to the Department of Defence and Armscor on this issue on the following dates :

- 7th March 2000, addressed to both to S. Shaikh, the Chief of Acquisitions of the Department of Defence and H.S. Thomo, the Chief Executive Officer of Armscor(Annexure Bxx).

- 10th July 2000, addressed to S. Shaikh , Chief of Acquisitions of the Department of Defence(Annexure Bxx).

- 5th October 2000, addressed to S. Shaikh, Chief of Acquisitions of the Department of Defence (Annexure Bxx).

I did not receive a response to any of the abovementioned letters.

209. In April 2001 it came to my attention through a document that I obtained entitled "*Report on the Process followed for System Management System (SMS) and the Navigation Distribution Sub-System (NDSS) for the SAN of Project SITRON*" that ADS was awarded the contract through a fundamentally flawed process. The document is of particular relevance because it was prepared by Armscor and was intended to provide a brief overview of the process that was followed for the acquisition of the SMS and NDSS for the SAN Patrol Corvette of Project Sitron(Annexure Bxx).

210. It is necessary to draw specific attention to the third and fifth paragraphs of this report which record the following :

"*The Offers were presented to the Project Team on 16th April 1999, the defined closing date. Thereafter, a team of technical personnel, compromising of SAN and Armscor engineers did an evaluation on the Offers and made recommendations to the Programme Manager and Project Officer.* ***Technically, all Offers complied to the User Requirement*** (my bold emphasis). *The CCII Offer had to be adjusted to include:*

Handling fee for non-ADS components (3.2% of total)
Integration fee (7% of total)
Estimated extended warranty (1.85% of total).

For the SMS, the following prices were evaluated:

ADS	*CCII*
R 29.647m	*R30.04m*

211. I have determined that the total of these three adjustments is 12,05%, i.e. a simple addition of the individual components and not a compounded addition. This is supported by the fact that the report refers to a total price adjustment factor of 0,8795; which is in effect 100% minus the sum of 3,2% plus 7% plus 1,85% [100% - (3,2% + 7% + 1,85%)]. The prices in the Report are inclusive of VAT.

212. However, I contend that it was not justifiable and was competitively unfair to add on a handling fee of 3,2% for non-ADS components for the reason that ADS was, certainly at that stage of the contract bidding process, merely another competitor. It was the JPT who had requested the competitive quotation through the GFC. I contend that ADS had, or, more accurately, should have had, nothing to do with the selection process for these sub-systems. Thus if a handling fee was, in fact applicable, then it should have been applied to both competing parties equally, or not at all.

213. Similarly, I contend that it was not justifiable and was competitively unfair to add on an integration fee of 7% for non-ADS components for the same reason as above. Thus if an integration fee was, in fact applicable, then it should have been applied to both competing parties, or not at all.

214. I do accept that at, on initial evaluation, it was justifiable to add the 1,85% to the offered price of the C²I² Systems's SMS in respect of extended warranty. Extended warranty had been explicitly excluded in the C²I² Systems offer as the two days given for quotation preparation was just too short for determination of the cost of providing such extended warranty under initial vessel operating conditions that were not clear or specified. However, if the adjustment is added to the price of the C²I² Systems SMS, then it needs to be verified that ADS had included this extended warranty in their offer.

215. However, it needs to be said that when C²I² Systems provided an updated quotation for the SMS on 20th May 1999, i.e. just five weeks later, such extended warranty was specifically **included** in the offered price with no upward adjustment.

216. The fact that the offer by C²I² Systems was unjustifiably increased to include handling and integration fees for non-ADS components illustrates that the competitive tender process was flawed and unfair as it permitted ADS to compete with C²I² Systems for the supply of sub-systems. It is my contention that this anomaly constituted a conflict of interest as well as an irregular tender process.

217. However, I believe that the shortcomings outlined above are minor by comparison with what I describe further.

218. The report goes on to record that the evaluation team recommended the ADS option, inter alia, based on their conclusion that :

"the all inclusive ADS price was marginally better than the CCII price (base price divided by 0,8795)."

219. I draw attention to the fact that the quoted price for the SMS by C²I² Systems' was R26,43 million including value-added tax. Even if the above adjustments are made, and I dispute that they are justifiable, the total figure does not add up to the amount of R30,04 million, but to a lesser amount of R29,61 million.

220. Thus C²I² Systems's price of R29,61 million was lower than ADS's price of R29,65 million, even after the adjustments were added to C²I² Systems's price.

221. I thus contend that C²I² Systems's offered price for the SMS was misrepresented in an attempt to justify the selection of the higher ADS offer.

222. The report states further that :

"*ADS has received funding under Project SUVECS for the definition and development of the SMS and has thus built up experience and a competent capability in this area.*"

If this was relevant, then I contend C²I² Systems should not have been requested to quote for the SMS if they were in any case going to be unsuccessful on these grounds. C²I² Systems could not really be expected to provide a better price that ADS having not been involved in the SMS before; nevertheless they did so while still being technically compliant.

223. The report states that :

"*The SMS is primarily a "system level" management tool and therefore should reside with the company which not only has the system expertise and knowledge, but also has the system integration responsibility.*"

If this was relevant, then C²I² Systems should not have been requested in the first place to quote for the SMS if they were in any case going to be unsuccessful on these grounds.

224. The report states that :

"*Given that ADS are the Combat Management System (CMS) suppliers, the system architecture requires intimate knowledge and close co-operation between the SMS and CMS. This would be best achieved if both were the responsibility of the same company.*

The success of the SMS requires extensive knowledge of all aspects of the Combat Suite - command and control and guns, trackers, missiles, interfaces, etc. ADS, being the designated Combat Suite integration entity, will be in a better position to ensure that all the user requirements are met, whereas CCII to date have focussed more on data communications systems only. It would require a steep (expensive and risky) learning curve for CCII to catch up to ADS in this area."

225. If this was true or relevant, then C²I² Systems should not have been requested in the first place to quote for the SMS if they were in any case going to be unsuccessful on these grounds. Furthermore, if ADS's status as the nominated CMS suppliers meant that it was a "***given***" that ADS would ultimately receive the CMS contract, then there is no reason why the same should not have been applied to C²I² Systems in relation to the IMS. Alternatively, if the award of the CMS contract to ADS was not guaranteed at that stage, then this consideration should not have been taken into account in awarding the SMS contract.

226. Furthermore, it is completely untrue that "*CCII to date have focussed more on data communications systems **only***." C²I² Systems had already been nominated to provide the Tracker Radar Console, the Search Radar Console and collaboration regarding the Combat Team Trainer for the Corvette Combat Suite. C²I² Systems were also selected to provide the IPMS Simulator for the Corvette platform. In addition, it was well known to the JPT that C²I² Systems had been selected to provide the local component of the Submarine Combat Management System software and also previously provided a number of other sophisticated systems of equivalent technology and complexity to the SA Army and SA Navy. These include Control and Display Systems for various SA Army radar systems and a Helicopter Take-off and Landing System for the SA Navy.

C²I² Systems had in any case been nominated to provide the Network Management Component of the SMS.

227. Thus it is fallacious for the JPT to make this statement.

228. Considering the following statement made in the report :

"*ADS proved to be a lower risk than CCII of getting the task completed as outlined in the above points.*"

I contend that this statement is incongruous for the following reasons :

- nothing whatsoever was **proved**. At best this is a false conclusion drawn from irrelevant and groundless premises.

- the tense might give the impression that ADS has already completed the SMS, which is quite false.

229. I would like to point out that on Page 2 of the report it is recorded, in the case of the SMS, that :

"*A fundamental point to note in this whole exercise is that the first quote received from ADS on 15th March 1999 was R64.73m and subsequent quote on 07th April was R37.62m. In going out on competitive tender, a normal business practice, the price was reduced to R29.65m. This equates to a saving to the State of at least R7.9 m for the SMS.*"

230. I contend that, while it is admirable to negotiate the best value for money for the State, the above statement is irretrievably flawed. Not only was there a better price offered for a product which met the technical requirements (namely, the C²I² Systems' offer), but it would appear from this statement that C²I² Systems was merely used to force a lower price from a previously single source tenderer (namely, ADS).

231. I would also like to point out that on Page 2 of the report it is recorded, in the case of the NDSS that :

"*Similarly for the NDSS. The first quotation received from ADS on 15th March 1999 was R45.94m and the subsequent quote on 7th April 1999 was R25.03m. As a normal business practice, the eliciting of a competitive quote reduced this price to R 15.99m, a saving of at least R 9.0m to the State.*"

232. In relation to the award of the NDS to C²I² Systems, the report states that :

"*CCII had already progressed a large way under project SUVECS in establishing the basic hardware and techniques for such data distribution.*"

This statement is again incorrect. At that stage C²I² Systems had done no work whatsoever on the NDSS under Project SUVECS or at all. C²I² Systems only received some minor funding under Project SUVECS during the following (i.e. 1999/2000) financial year.

233. The report further states that :

"*The NDSS is not a trivial sub-system, but then again it is not as complex as the SMS or some of the other sub-systems comprising the Combat Suite*."

The NDSS is certainly not trivial; it is, in fact, what is categorised as a mission-critical sub-system within the combat suite. This means that if it fails, the combat suite fails meaning that the whole ship fails functionally. The NDSS contract was nevertheless awarded to C²I² Systems without them having being involved in the NDSS before, or without having to provide a performance guarantee for the NDSS, or even this being mentioned to them as a requirement.

234. The report states that :

"*Data communications has never been a strong point of ADS whose real expertise lies in the domain of command and control systems.*"

The statement that "*Data communications has never been a strong point of ADS*" is certainly true. That is why C²I² Systems were contracted by Armscor to develop the IMS for the corvette combat suite.

235. The report states that :

"*The risk of CCII not being able to complete the task was deemed to be acceptable.*"

I contend that it is inconsistent to conclude simultaneous that, in respect of the NDSS :

"*The risk of CCII not being able to complete the task was **deemed** to be acceptable*"

and in respect of the SMS :

"*ADS **proved** to be a lower risk than CCII of getting the task completed as outlined in the above points.*"

236. While C²I² Systems were awarded the NDSS contract, I contend that this was both unavoidable in light of the greatly lower price offered, but more importantly it was done in an attempt to placate us for losing both the IMS and SMS contracts.

Integrated Platform Management System (IPMS) Simulator

237. At this point, I need to mention that on 23rd June 1999 we were requested to submit an offer for the IPMS Simulator (IPMSS) to Blohm+Voss, a member of the GFC. Although we were formally and finally selected by the Project Control Board to supply the IPMS Simulator in terms of Armscor letter to the GFC dated 29th June 1999, Blohm+Voss then requested an extension of validity of our offer until 30th June 2000 and then again until 30th March 2001. On 19th February 2001, Blohm+Voss supplied us for the first time with the detailed *Requirement Specification* and requested us to supply a "*last and final offer*" by 2nd March 2001, which we did after an extension of three days. We were eventually informed by them on 11th April 2001 that we were not being awarded the contract for the IPMS Simulator.

238. Pierre Moynot's also refers to this matter in his letter to us dated 26th July 1999 :

"*To my knowledge, they* [C²I² Systems] *have also been selected as preferred supplier for another subsystem part of the platform as subcontractor to GFC.*"

239. During then-Capt Kamerman's testimony in SCOPA hearings of 11th October 2000, he reported as follows :

"*They are also critically involved in the software development of the machinery control system.*"

He was referring to the IPMS Simulator.

240. In the draft *Project Sitron: Contractor Security Plan* (classified as Confidential) dated 20th January 2001, C²I² Systems are also referred to the contractor for the IPMS Simulator.

241. It is thus clear that C²I² Systems was de-selected in respect of the IPMS Simulator at a very late stage. Both Armscor and the GFC have been requested to provide reasons, but have so far refused to do so.

Request for Best and Final Offer (RFBAFO)

242. Returning now to the issue of the IMS, on 6th May 1999, a RFBAFO was issued by the DoD to "*Messrs German Frigate Consortium and African Defence Systems (PTY) Ltd*" (sic) in respect of the Corvette. In substance, however, in respect of the Combat Suite, it was issued to ADS who passed it on to the sub-contractors. ADS submitted it to C²I² Systems as per their letter dated 13th May 1999 where they requested that the Best and Final Offer be submitted by 14th May 1999, i.e. the very next day. As it was a best and final offer with a host of industrial participation, warranty, optional 5th Corvette and other requirements, it was very difficult for us to provide a full and binding commercial offer within the timescales specified.

243. Attached to the letter (as Appendix "A"), was a covering letter from the Corvette Joint Project Team, dated 6th May, 1999, addressed to GFC and ADS and signed by then-Capt Kamerman, the Project Officer representing the DoD and Mr Frits Nortjé, the Programme Manager for the Corvette Programme, representing Armscor. Appendix "B" of the letter consists of the *Combat Suite Baseline for Vessel Best and Final Offer* as well as Capt Kamerman's letter of 31st March 1999 to GFC headed *Project Sitron Combat Suite Design to Cost Measures*, with a spreadsheet referred to in it.

244. This spreadsheet, consisting of two A3 pages, refers to C²I² Systems as the **contractor** for the Information Management System. Moresoever, this spreadsheet provides the price provided by C²I² Systems for the IMS. This is a clear indication, yet again, that C²I² Systems was not only the nominated supplier, but had now become the **selected** or **preferred supplier** or **contractor** of the IMS and thereby had a legitimate expectation of being awarded the contract(Annexure Axx).

Government Responsibility for Sub-Contracting

245. Regarding the formal selections of the Project Control Board, I find it difficult to accept that the South African government repeatedly denies that it had anything to do with the sub-contracting for these defence acquisition contracts, specifically the Corvette. In fact, the ministerial sub-committee repeated this assertion during the SCOPA hearings of 26th February 2001.

246. The facts of the matter are that, in respect of the Corvettes, the RFO nominated the various sub-contractors for the Combat Suite, the RFBAFO selected these sub-contractors and finally an official letter from the Chief Executive Officer of the government's contracting agency, i.e. Armscor, notified the prime contractor of the selected equipment and the suppliers thereof. In this regard, they advised the GFC of not only their selection concerning the Combat Suite, but also the vessel platform.

247. In a letter dated 29th June 1999 to GFC by Mr L.R. Swan, the then Chief Executive Officer of Armscor, the Project Control Board's decisions regarding the selection of the suppliers for the Corvette programme, are reflected, not only for the Combat Suite, but also for the ship's machinery. Here C²I² Systems is reflected as the supplier for the Integrated Platform Management System (IPMS) Simulator. The significance of this document is that it makes it clear that it was the Project Control Board, acting on behalf Armscor, representing the Department of Defence, that took the decision regarding the selection of equipment suppliers(Annexure Axx).

248. One of the sub-contractors who are indicated in terms of this letter as preferred suppliers of equipment is Maag Gear AG of Switzerland.

249. On the 23rd August 1999, Mr N. Hopp of Blohm+Voss writes to Mr J. van Dyk, Senior Manager of Defence Industrial Participation of Armscor, as follows :

"*Referring to your fax message dated 12.08.99 stating that Armscor is requesting GFC to change from Gear Manufacturer MAAG to RENK we like to inform ARMSCOR that MAAG has been choosen (sic) for technical reasons. We had been aware that the DIP of RENK was more attractive than the one of MAAG.*

After your request we convinced MAAG to improve their DIP and NIP as follows:.....

Please take this into account when deciding in your meeting."

250. However, at the PCB of 24th August 1999, the following is minuted :

"*Acting POPS informed the board that deliberations around the selection of either the Maag Gearbox or the Renk Gearbox were continuing and that Mr J. van Dyk (SM DIP) was investigating the issue. The dilemma being that, whereas the Maag Gearbox is the approved selected option, the inclusion of the Renk gearbox would provide much needed work for Gear-Ratio, a division of Reumech-OMC. C Acq stated that the key issue was compliance with the technical baseline and if both gearboxes meet this baseline, preference will be determined by DIP related issues. He instructed the project team to take the lead in determining this requirement.*"

251. On the 25th August 1999, Mr B. de Beer, Manager of DIP Agreements of Armscor (who reported to Mr J. van Dyk), writes to Mr N. Hopp of Blohm+Voss as follows :

"*We would like to notify GFC of the importance of Reumech Gear Ratio to ARMSCOR and the DoD in terms of indigenous/strategic support capability and capacity.*"

252. On the 9th December 1999, Mr J. van Dyk of Armscor writes to Joesten Marketing (Pty) Ltd, i.e. Maag's agent in South Africa, as follows :

"*Your conclusion that Armscor reversed the original decision of the "Technical Task" team is not true as the gearbox was originally a choice made by the GFC and not by Armscor. It is correct that Armscor opened this issued for detailed assessments of the two gearbox proposals. The results of the technical, price and DIP evaluation were tabled to the Naval Project Control Board who ratified the findings and recommendations of the respective evaluation teams.*"

This explanation appears to be disingenuous especially since the other documents I have quoted show that Armscor was indeed instrumental in causing the switch from Maag to Reumech Gear Ratio.

253. In passing and with reference to Mr B. de Beers's letter of 25th August 1999 I point out that Armscor/DoD apparently attached to "*indigenous strategic support, capability and capacity*" provide a potent reason for C^2I^2 Systems's IMS to have been selected in preference to Thomson-CSF Detexis.

"Risk" Issues

254. In terms of the contract, the vessels are only to be delivered 30 months after the effective date of contract (EDC), EDC being in mid-April 2000. The first vessel therefore gets delivered to Simon's Town in October 2002 at the earliest without a Combat Suite. Thereafter, there is a period of between one and two years when ADS tests the sub-systems in a "stone frigate", i.e. the Integrated Test Bed (ITB) and only thereafter are they fitted into the ships and acceptance trials take place. In effect, one is talking here of a five to six year period. There was therefore more than enough time to fully complete C²I² Systems's product, even with the changes specified by ADS.

255. I further reject the contention that the reason why C²I² Systems did not get the contract for the IMS was that its system was not proven and therefore constituted a risk.

256. In this regard, I should point out that C²I² Systems got the contract for the Navigation Distribution System (NDS). Although smaller in scope than the IMS, the NDS is nevertheless a mission-critical part of the Corvette Combat Suite. ADS was originally nominated to provide the NDS and had quoted for it, but because their quoted price was so high, the DoD rejected it and then went out on a closed, competitive tender between C²I² Systems and ADS. C²I² Systems beat ADS in two rounds of tendering. We got this contract although we had no product. In fact, by the time we were declared preferred supplier for the NDSS, we had not even started any technology development on it. Apart from beating ADS in a competitive tender, even though this was loaded against us by a factor of 10,2%, we felt we were given this contract to placate us after having had the IMS contract taken away from us. However, as far as I am concerned, the NDS contract is not only much smaller in value than the IMS contract would have been, but also the IMS is a much more significant part of the Combat Suite in terms of architecture, as well as because of its strategic, long-term importance to the SAN.

257. Furthermore, some of the other sub-contractors' systems were also not proven, e.g. the Optronic Radar Tracker (ORT) of Reutech Radar Systems, as well as Kentron's Surface-to-Air Missile (SAM) were in their comparative infancy stages of development. As such they constituted a significant level of risk. As far as I know, the other sub-contractors did not have to supply a performance guarantee.

258. As early as mid 1998 Alex Duigan of ADS had attempted to introduce the idea of an integration risk by recording the following in the minutes of the SUVECS Workgroup on Computing Segment Technology held at ADS on 4th November 1998 :

"*Risk areas identified by SAN post May '98 Road show tabled on 9 July 1998 were;...*
2.2.3 Integration risk with the complexity of a single bus."

In fact, this statement was neither made during the workgroup, nor in the "SAN Roadshow", nor was it true. It was later formally retracted by Alex Duigan by letter on 4th January 1999.

259. In view of the unfounded allegations of risk pertaining to C²I² Systems's IMS, made by ADS at every opportunity available to them, I compiled a document entitled *Refutation of Allegations of Risk concerning the Combat Suite Information Management System*. In this document, I deal with all the points of criticism of the IMS(Annexure Axx).

260. Regarding the matter of risk, the JPT drew up a spreadsheet entitled *Project Sitron Definition Audit : May* (strikeout) ~~*1998*~~ *1999* where the "*Risk Assessment*" of the "*Candidate Suppliers*" is recorded. The costs and risks of the nominated sub-systems of these "candidate suppliers" is described in terms of a sub-title of the spreadsheet being "*Project Sitron Costing Estimate November 1998 (based on May 98 Audit Adjusted for Escalation, ROE and Design Changes May - Nov 98*)". Here the Risk Assessment of the "*Information Management System, including, Network Interface Cards, Gateway Interface Unit*" is recorded as "***Low***".

261. I thus contest the subsequent assertions that the risk of the IMS was “high”. Such assertions during the SCOPA hearings by the Chief of Acquisitions and the Project Officer were incorrect.

262. I believe that technically there was no risk, or very little risk, certainly none than could not be expected in the development of a new Combat Suite and none that could not be managed within the programme's formal risk management regime. I can also mention that C²I² Systems developed a Tracking Radar Console (TRC) on behalf of Reutech Radar Systems for the Corvettes. This includes an IMS link between the TRC and the radar system itself. For over two years now, the TRC, with its IMS link, have been working very aptly.

263. It was alleged by Mr Shaikh during the SCOPA hearings of 11th October 2000, as well as by the Cabinet Sub-Committee on 12th January 2001, that C²I² Systems was requested to provide a performance guarantee for the IMS and that we refused to do so. This is completely untrue. We were never asked for such a guarantee, either verbally or in writing, either by ADS or Thomson-CSF or the GFC or by Armscor.

264. Furthermore, C²I² Systems formally and in writing by means of three letters to Pierre Moynot of ADS dated 7th June 1999(Annexure Axx), 15th July 1999(Annexure Axx) and 29th July 1999(Annexure Axx) and without being requested to do so, offered both a performance guarantee and a risk management proposal, specifically tailored to the IMS in its role as the integration mechanism for the Corvette Combat Suite.

265. In my letter dated 7th June 1999, I made the following offer to ADS :

“*Regarding responsibility for performance, C²I² Systems are definitely prepared to "put our money where our mouths are" regarding the IMS. In this respect, we are more that willing to discuss matters such as performance guarantees for the IMS, risk management, contractual terms and conditions, etc. These are matters which have been mentioned informally during the preparation of the numerous rounds of offer preparation, but have never been formally raised between our companies.*

We believe that there are a number of ways that a satisfactory arrangement concerning responsibility for IMS performance could be achieved, i.e. where Thomson/ADS would not unduly have to take the risk for the IMS.

For example, C²I² Systems could be given a fixed period (typically 8 months) in which to achieve a pre-agreed target of pre-integration readiness, failing which the inclusion of the IMS in the Combat Suite could be reviewed.”

266. These offers was not even acknowledged by ADS, the DoD or Armscor, let alone discussed or negotiated with C²I² Systems.

267. Despite allegations of risk made by, inter alia, the Chief of Acquisitions, ADS and later by the Corvette Project Officer, no proper risk assessment of the IMS (other than the favourable one mentioned above) was made by either GFC, Thomson, ADS or any other party. This is despite the fact that the IMS was subject to a very formal and rigorously applied risk management regime during the multi-year development phase of Project SUVECS and the first stage of Project Sitron (with reference to the minutes of regular Project Progress Meetings, Technical Committee Meetings as well as Task Status Lists).

268. However, Blohm+Voss and Thomson-CSF both made visits to us :

269. Klaus Katenkamp and Ranier Hohfeld, who were representatives of Blohm+Voss, a member of the GFC, visited C²I² Systems on 18th December 1998 prior to the Best and Final Offer stage to inspect and assess the IMS. They advised us that they were very satisfied with the IMS.

270. In about October 1999, ADS and Thomson-CSF also paid us visit to our offices where we described and discussed the IMS. The feedback given to us from their Product Manager of Combat Management Systems, Emmanuel Mary, was as follows :

"*As we discussed yesterday, I send you this message for confirming you my feelings about C2I2 bus and about the discussion I had this week with Lewis Mathieson.*

For C2I2, I could say - Richard and the people I met in Cape Town are quite brilliant and competent,

- *the technical choices they made are good, and there's no theoretical reason which allow me to say it can't work,*

- *But the company is small (that means that if a problem occurs, it can become a big problem very fast), and what they want to do is very sophisticated, complicated and will take time to validate, tune and make sure it works.*

I have been very interested by the discussion that I had on the bus and on C2I2 with Lewis. I think we understand now much better what are the real constraints of the other one. For example, I think that it's clear now for Lewis that our concern is not a technical one, but the fact that we just can't accept to be fully dependent on a non already proven technology for the system integration on such a big program. At the same time, it's clear for me that Armscor can't just forget what they invested in this technology (which can work)."

271. Although he says that "*what they want to do is very sophisticated, complicated and will take time to validate, tune and make sure it works*", this had essentially already been completed. It is also incorrect to describe the IMS as "*non already proven technology*". The essential characteristics of the technology were already in use in the US Navy and the IMS developed by C²I² Systems had rigorously been proven in accordance with tests approved by the SAN, Armscor and ADS.

272. However, they only spent a short time with us (about two hours) and didn't even want to see the IMS actually working in our laboratories.

"Risk"-Driven Price Factors

273. When the Corvette contract was awarded to the European South African Corvette Consortium (ESACC), it was placed as a single contract with the suppliers being placed in three categories :

1. Category A, being the German Frigate Consortium in respect of the supply of the ship platforms.

2. Category B, being the sub-systems of ADS and Thomson, as well as the integrated Combat Suite once sub-systems had been transferred from Category C after formal sub-system Factory Acceptance Tests (FATs), as accepted by ADS and the JPT.

3. Category C, the South African Industry sub-system suppliers as well as the foreign supplier of the SSM, the pre-FATs risk for whom was taken by the SAN.

274. The IMS of C^2I^2 Systems was initially classified as Category C by SAN. However, when ADS changed the whole Combat Suite architecture, ADS's CMS became central to the whole Combat Suite architecture and where the IMS would form the connectivity part of the CMS, the JPT decided that the IMS should be re-categorised as Category B, which meant that ADS had to take responsibility for the IMS as well as the whole integrated Combat Suite. So in effect, JPT forced ADS to provide a performance guarantee for our system.

275. By adding a risk premium of some R40 million to our price of R38 million, plus adding a mark-up of R4 million and adding a risk management fee of R9 million, i.e. making a price of R89 million in all, ADS pushed our price up so high that we were not competitive any more. C^2I^2 Systems was then not selected on account of price, as driven by "risk".

Baseline Changes

276. Further to significantly increasing our price, ADS obtained a quote from Detexis, a subsidiary of Thomson-CSF, who also quoted for the "*Combat Suite Data Bus*" (hereinafter referred to as CSDB) to replace the IMS. The CSDB did not comply with the URS issued by SAN and in effect ADS replaced our system, which was fully compliant with the tender baseline specifications, with the completely non-compliant system of a Thomson-CSF subsidiary.

277. In an attempt to rectify this situation, that is in respect of baseline "management", the URS was contractually superseded by the specification called the *System Specification* (classified as Confidential) or SSS, a document written by ADS.

278. Whereas the original issue of the SSS was almost identical to the URS, in the second issue of the SSS dated 2nd July 1999 all references to our IMS are present, but in *strikeout* text. In the third and final issue dated 16th July 1999 all references to the IMS have been removed and replaced with references to the Detexis CSDB(Annexure Axx).

279. I believe that supersession of the URS with ADS's SSS specification is highly irregular into terms of the SANDF's formal acquisition practices for cardinal acquisition programmes. The URS itself states that it "*takes precedence over all Contractor documentation which shall also be traceable to this document*".

280. I have been told that the DoD has attempted, irregularly in my opinion, to formalise the difference between the SSS and the URS in a so-called *Delta Document*. However, I have not had sight of this document.

Assessment of Relative Merits of C²I² Systems IMS and Detexis CSDB

281. In late May 1999 it became apparent to the JPT that I was not going to accept our IMS's de-selection without a formal complaint. To address the matter, the Project Officer tasked a study group to meet on the 3rd and 4th June 1999 at SAN's Naval Engineering Bureau in Silvermine, Cape Town. The study group consisted of Lewis Mathieson, the Combat Suite Programme Manager of Armscor; Cdr Ian Egan-Fowler, the SAN Project Engineer for the Corvette Combat Suite; other Navy officers such as then-Cdr (now Capt) Nic Marais and Lt Cdr Andrew Cothill; as well as Dr Wolfgang Vogel, an independent expert from Blohm+Voss who is an acknowledged ship combat system specialist. Detexis also brought in two officials, Jean-Marc Ferre, Export Sales Manager and Laurent Royer, Business Manager, to describe the Detexis Diacerto bus. The study team produced the document entitled *Report on the Diacerto Bus proposed for the SAN for Project Sitron* (classified as Restricted).

282. The report cites 15 reasons why the C²I² Systems system should be retained and only six negatives, most of which are not true. I shall deal with these six negatives in due course, but I shall point out in any event that the ultimate recommendation of the evaluation was in favour of the IMS in preference to the Detexis Diacerto CSDB.

283. The report provides the following conclusions concerning the Detexis Diacerto CSDB:

"*1. Extensive use is made of copper (twisted pairs) for the connection of subsystems to SIFUs and SIFUs to switches. This greatly enhances the expected EMI/EMC problems which Thomson has already said they will not be accepting any responsibility for.*

2. The LAN and implementation of the architecture is very simple and static. There is no automatic reconfiguration and after two faults, the LAN can be considered to be "down".

3. While the proposed products (100 Mbit/s ethernet) are based on existing products (10 Mbit/s ethernet), there is still a degree of development which has to take place. The Diacerto boxes do not exist for 100 Mbit/s ethernet and have to be developed and qualified.

4. The system comprises many components of proprietary software. The fact that it is deterministic ethernet means that it is not "COTS" and the SAN will have to rely heavily on the supplier for future support, despite allegations to the contrary by the supplier.

5. This 100 Mbitls ethernet system has never been done on a warship before.

6. The details of the design have not been thought through, e.g. error budgets and there is still a lot of design work that has to be completed. The design is in fact only a concept at this stage.

7. While a fibre optic backbone has been included in the system, this has been included purely to pacify the SAN and does not serve any real purpose other than to overcome the limitations of distances with copper. The backbone is not redundant.

8. The growth of the system is limited, if not non-existent. Because it is essentially a point-to-point system, major rework is required for each sub-system should another sub-system have to be added.

9. The increased number of cables present, as well as the complexity of the switches will make trouble-shooting and maintenance difficult.

10. There is no forward error correction on the bus, therefore the guarantee of data delivery will suffer.

11. *The system will degrade with time. Ethernet requires that the system is impedance balanced -as and when the wires/connectors are degraded or repaired, these discontinuities cause impedance imbalances and the system performance suffers accordingly.*

12. *There is no asynchronous mode. It is strange that this was one of the major stumbling blocks for the CMS requiring its own LAN, yet there is no problem when this LAN has the same problems of the IMS.*

13. *System synchronisation is going to be a problem. Ethernet, being a CSMA/CD system is inherently non-deterministic and difficult to synchronise. The proprietary software claims to make it deterministic, but the CS project team still feels that there will be problems with system/sub-system synchronisation. While the current architecture may comply to the April 7th architecture, the April 7th architecture was based on an open, deterministic FDDI architecture.*

14. *The addition of the Diacerto boxes and switches adds more hardware to the system => decreased reliability and availability and increased maintenance and spares.*

15. *Strategically the core technical understanding and support of this system will lie in the hands of the supplier. The proposal is that technology will be transferred to ADS. However, ADS do not have any people who are datacomms experts nor should this provide any re-assurance to the SAN in terms of reduction of life-cycle costs or ease of upgrade.*

16. *It is the CS project team's expert opinion that for a mid-life upgrade of the vessels, the entire LAN will have to be replaced with the associated consequences on the CS. ”*

284. The report offers the following conclusions on the “positive” side of the Diacerto databus :

“1. *100 Mbit/s ethernet technology is mature.* Actually at the time, 10 Mbit/s was mature, but as Point 2 hereunder indicates, the 100 Mbit/s (which was being proposed to SAN) alludes to some changes even though not conceptual.

2. *The transition from the current base of 10 Mbit/s ethernet to 100 Mbit/s ethernet will not require any **conceptual** changes.*

3. *Network latency is low and guaranteed (it is in essence a hardwired solution).* This is incorrect. The network latency (i.e. the delay from transmission to reception) is not low and cannot be guaranteed end-to-end, i.e. through both switches.

4. *It is a simple network.* My opinion is that it is a simplistic network, that overall is much more complex to implement, test, qualify and maintain.

5. *The selling price is lower.* Only if one thinks that R49 million is lower than R43 million (the IMS price prior to the unjustifiable premium for risk). Furthermore SAN’s primary concern, as has previously been stated, was on lifecycle cost and not acquisition cost. The report itself states that the lifecycle cost of the Detexis system was in all likelihood to be very high (e.g. Points 14 and 16).

6. *It will satisfy the user requirements.* It does not and cannot meet the requirements specified by the URS. As I have shown earlier, the Detexis latency of 6,5 milliseconds for a 165 byte message falls far short of the URS’s requirement of 5 milliseconds for a 4 000 byte message.

285. The report lists the problems foreseen with the current IMS based architecture as follows :

"1. The IMS is still under primary development, but there is also some development required for the Diacerto bus. IMS was not, even at that stage, under **primary** development; it was well into the test and evaluation phase with all critical and major characteristics already formally proven.

2. The IMS is also not off-the shelf, although it also uses COTS building blocks. It is not possible to buy any combat system network "off-the-shelf" so this is a spurious argument. The IMS fully met the requirements in the *Element Costing and Description* of making extensive use of COTS technology, certainly more so than the Detexis system. In other words, this supposed criticism of the IMS should more have properly been levelled at the Detexis system.

3. The integration relationship between the IMS supplier and the System integrator is going to cause problems for the project later on. This is neither a valid technical or logical argument. C²I² Systems is doing the NDS sub-system which provides mission-critical data to the Combat Suite; this didn't seem then, nor does it seem now, to constitute a "relationship problem". In any case it was ADS who precipitated any breakdown in relationship by changing the baseline to suit themselves and their parent company, Thomson-CSF.

4. The cost of the IMS is high. Again, only if one thinks that R43 million is higher than R49 million.

5. The IMS does not currently provide for TCP/IP. This is not true. Not only did we propose offering TCP/IP as an option, but we provided a working TCP/IP protocol, running on our hardware to ADS in late 1998. As I explained earlier, this TCP/IP offer was referred to the *dual protocol stack*. ADS actually requested in one of their RFOs for us to quote for TCP/IP running under APIS. However, the JPT directed us to "*remove provision for the dual protocol stack*" in the RFBAFO (May 1999). In the circumstances, I find this point of criticism inexplicable.

6. The IMS has also not been put on a warship. This is true, but largely irrelevant as FDDI and all IMS protocols are the basis of SAFENET which is in widespread naval use around the world including by the US Navy, Royal Navy, German Navy and the Swedish Navy. Furthermore, SAN/Armscor had over a number of years commissioned the development of the IMS and spent a considerable amount of money on it (as had C²I² Systems itself) with the specific intention that the IMS should in due course be put on SAN warships. This is therefore hardly a valid point of criticism so late in the day.

286. The report concludes by stating the following :

"*From a technical point of view, the CS project team **proposes** that the current architecture based on the IMS be retained for the following reasons :*" (my bold emphasis).

287. The report goes on to list 15 reasons as follows :

"*1. The IMS is completing milestone III and is in an advanced stage of development/testing.*

2. The IMS supports an open architecture.

3. With a fibre infrastructure in place it is easy to upgrade to other protocols such as A TM or fibre channel.

4. It will be easier to manage and troubleshoot with the IMS resulting in easier maintenance.

5. The IMS is quad redundant and has automatic re-configuration.

6. The IMS provides guaranteed data delivery.

7. *The IMS sub-system interfaces have already been developed.*

8. *The EMC/EMI problems become non-existent for the LAN infrastructure.*

9 . *The detailed system design has been done (DACs).*

10. *Growth of the system can easily take place.*

11. *Life-cycle costs will be reduced because of the easy growth, and higher reliability of the fibre infrastructure.*

12. *The IMS performance will not degrade as a rapidly as a function of time (it is not reliant on impedance balances).*

13. *The IMS provides a better strategic advantage to the SAN as all algorithms are locally developed and controlled.*

14. *The IMS has more features and flexibility.*

15. *Both Thomson and GFC recognise that the IMS is a superior product.*"

288. However, in the *Report on the Process Followed for Information Management System (IMS) for the SAN of Project Sitron*, issued to Mr H.S. Thomo, Chief Executive Officer of Armscor and signed by Mr Frits Nortjé, the Corvette Programme Manager, it states the following :

"*During a worksession over the period 03 - 04 June 1999 with the Detexis engineers, the Combat Suite engineers did a technical evaluation of the proposed CSDB and verified that it will indeed meet the SAN's requirements for a databus, albeit with some limitations.*"

Firstly, the Detexis representatives were not engineers, they were, in fact, sales and business managers. Their job is to sell their product, not to evaluate it against a competing product.

289. Secondly, it is impossible for the Detexis system to "*meet the SAN's requirements for a databus*", because it is not a databus. In fact, in the report, the evaluation team had stated that "*it is essentially a point-to-point system*".

The Diacerto Bus, even by definition of terms, can in no way conform to the SAN's stated requirements for a databus or LAN, as specified in the NSR or URS.

290. I contend that the Diacerto Bus is a proprietary technology (as per the JPT's Report) and does not support an open system architecture and therefore violates the Naval Staff Requirement (NSR).

291. In his report Mr Nortjé continues :

"*Based on these **recommendations** and the reduced price, the SITRON project team accepted the Detexis offer and included it in the technical baseline currently on the table.*" (my bold emphasis).

292. I contend that Mr Nortjé's report misrepresents the facts, findings and final recommendation of the evaluation team. In fact, his report in effect **overturns** a recommendation of the team of technical experts, consisting SAN and Blohm+Voss engineers, especially convened to evaluate the matter. I contend that this highly irregular.

293. Also highly irregular in my opinion is the fact that the Sitron Project Team made a decision directly at odds with the recommendation of the evaluation team. Accumulatively, the sixteen points of criticism of the Detexis System make it inconceivable to me that the Detexis system could have been chosen. Indeed, there are a number of points of criticism which would each individually be sufficient reason to reject the Detexis system.

Disclosure of C²I² Systems's IMS Price

294. I have been told that during this review by the evaluation team, C²I² Systems's offer for the IMS, i.e. price and technical specifications, was openly discussed by Detexis. That they had this knowledge is in breach of C²I² Systems's *Non-Disclosure Agreement* with ADS.

295. Furthermore, when I was told by the JPT that the IMS was in the process of being replaced by ADS, they advised me to formally approach ADS with a view to resolving this matter to the mutual satisfaction of all stakeholders. To this end, I flew up to Johannesburg 20th July 1999 to try and resolve the matter with ADS. I met the Chief Executive Officer, Pierre Moynot, who, *inter alia*, told me that Thomson/Detexis could also supply the system for R38 million.

296. In response, I said that this indicated that our price had been given to Detexis, our competitor. His reply was to the effect that they had decided that our system had risk and that they therefore had decided that if they had to replace our system they would look for a Thomson-CSF group company that could offer something similar. They then spoke to Detexis who responded that if C²I² Systems could do it for R38 million, then they could also do it for the same price. He told me this face-to-face, but subsequently denied it when I wrote to him. He then alleged that ADS merely compared prices internally. In this regard, I refer to copies of my letter of 29th July 1999 to the Chief Executive Officer of ADS, Mr Moynot's reply of 29th July 1999 and my reply of 30th July 2000(Annexures Axx, Axx, and Axx).

297. I am sure that people like Capt Marais and possibly Cdr Egan-Fowler can confirm that Detexis knew our price.

298. I consider it important to ascertain the source of this disclosure of our confidential price information to Detexis.

299. I do not know whether Detexis submitted a proposal and whether it was submitted before the closing date of the Request for Best and Final Offer, i.e. 14th May 1999. However, if they did so, it would be irregular because the RFBAFO issued by the JPT only specifies C²I² Systems as a supplier of the IMS with there being no mention of any other supplier.

300. If Detexis was allowed to make a proposal after the 14th May 1999, then C²I² Systems should have been informed that it was now competing with Detexis for the network sub-system and it should also have been given the opportunity to put in a further offer. However, I must emphasise that Detexis could not properly been invited to make an offer without formal changes to the baseline changes which, as far as I am aware, never happened.

301. In my view the acquisition procedure relating to Detexis was highly irregular. Certainly it also had an effect on defence industrial participation and long-term strategic support of the Combat Suite, that is because a locally developed and conformant system was replaced by the non-conformant product of a foreign-owned company, which ADS was at that time.

Conflicts of Interest : Corvette Combat Suite (Project Sitron)

302. I am also concerned about the conflict of interest situation, information of which was disclosed *inter alia* at the SCOPA hearings of 11th October 2000 and 26th February 2001 as well as in the press. In essence, Mr Shamin Shaikh, who is the Chief of Acquisitions in the Department of Defence, is the brother of Mr Schabir Shaikh, who is a Director of Thomson-CSF Holding (Southern Africa) (Pty) Ltd, as well as Nkobi Investments (Pty) Ltd and Nkobi Holdings (Pty) Ltd.

303. Although it is alleged, inter alia by the ex-Chief of the SA Navy during the Public Protector's hearings into the Arms Deal, that Mr Shamin Shaikh recused himself from programme meetings where his conflict of interest was relevant, I believe this not to be true.

304. For one thing, I was told by Mr Kevin Hanafey, Senior Manager of Armscor's Maritime Division, that on certain occasions Mr Shaikh merely handed over the chairmanship of the meeting to someone else and then remained present and took part in the discussions and decision-making. He described Mr Shaikh's supposed "recusal" as a farce, or words to that effect.

305. In fact, if one refers to the minutes of the Project Control Board (PCB) meeting of 24th August 1999 (classified as Confidential), one may immediately conclude that Mr Shaikh not only chaired the meeting in his capacity of Chief of Acquisitions representing the Secretariat of Defence, but that he signed the minutes as chairman. There is no record of him leaving the room or recusing himself and there is no mention of handing over chairmanship of the meeting to the Chief of the Navy or anyone else for that matter. There is merely a brief reference, at the end of the discussion on Project Sitron, to a prior recordal of Mr Shaikh's "*possible conflict of interest*". I shall return to this hereunder.

306. These minutes prove furthermore that Mr Shaikh participated in the discussions on the Corvette Combat Suite :

> "*a. The project team categorised the C²I² Bus as a Category B risk, ie the Prime Contractor retains full responsibility for the delivery and performance of a fully integrated vessel, which includes sub-systems which have a critical effect on the overall vessel delivery. Further, acting POPS informed the board that if the C²I² Data BUS option was selected over the ADS DETEXUS (sic) Data BUS the project team would have to find the extra funds required to bring both options to a par wrt risk coverage. This would result in lifting the ceiling price of the Corvettes.*"

307. Specifically with regard to the matter of the IMS, Mr Shaikh is recorded as saying the following :

> "*b. C Acq informed the board that the CEO of Armscor had presented this matter to the AAC and that the Minister supported the issue of the main contractor carrying the overall risk and the responsibilities for the sub-contractors. If the principle of the main contractor carrying the risk is changed, then the added difference in costs will have to be borne by the DoD. The principle of the main contractor carrying the risk must be adhered to. The AAC decided that the ceiling cost of the equipment must not be raised.*"

308. My contention that Mr Shaikh did not recuse himself from matters involving the ADS and the Corvette Combat Suite, is supported by the following reference to a memorandum from the Programme Manager: Patrol Corvettes, Mr Frits Nortjé, to Sipho Thomo, CEO of Armscor, marked 11th February 2000 :

> "*Furthermore, the matter has also been referred to and discussed at the Project Control Board (PCB) where the final decision not to use the CCII databus was exercised, with Mr S. Shaikh indicating that he had cabinet support in this regard.*".

309. Regarding Mr Shaikh's reporting of his conflict of interest, I refer to Paragraph 15 of the minutes of PCB meeting :

"***Ratification by the Board.*** *The following proposals by the project team, detail of which are (sic) contained at Appendix F (sic), were ratified by the board (Note: Refer to C Acq's possible conflict of interest as indicated in par 13 of the minutes of th PCB held 28 April 1999.):"*

The proposals under consideration have nothing to do with the IMS matter.

310. However, when questioned during the SCOPA hearings of 11th October 2000 on the issue of conflict of interest, the DoD's written response refers to Mr Shaikh's recording of his conflict of interest :

"at the first PCB meeting held on 4th December 1998".

311. The DoD's written response to the SCOPA hearings of 11th October 2000 also refers to a so-called decision at the PCB meeting of the 24th August 1999, to the following effect :

"*The CS Supplier, incl the Databus was accepted*".

312. The DoD's written response to the SCOPA hearings of 11th October 2000 also states the following :

"*The project team presented a recommendation to the Project Control Board on 24 August 1999 for the Detexis IMS as proposed by the Main Contractor and supported by the Project Team. The Project Control Board, Chaired by the Chief of the Navy, in terms of Chief of Acquisition's recusal during Corvette combat suite decisions, ratified this recommendation, which was supported by the CEO of Armscor (See Note below).*

313. The minutes of the PCB meeting of 24th August 1999 do not reflect that the aforegoing decisions were made at the meeting nor that the meeting was chaired by the Chief of th Navy, nor that Mr Shaikh recused himself.

314. I have also heard that Mr Shaikh's first formal recording of his conflict of interest was to the Chief of the SANDF in late September 1999.

315. To me, there seem to be numerous inconsistencies with both the dates and the manner in which Mr Shaikh's supposed recording of his conflict of interest.

316. Also when questioned during the SCOPA hearings of 11th October 2000 on the issue of conflict of interest, Mr Shaikh responded that he only had one conflict of interest and that was concerning ADS. However, I also contend that he has a further conflict of interest regarding Thomson-CSF, similarly by virtue of his brother's shareholding and directorship of Thomson-CSF Holding (Southern Africa) (Pty) Ltd and therefore indirectly with Thomson-CSF.

317. Additionally, the GFC state in their response to the Request for Final Offer for the Corvette, dated 11th May 1998, that :

"*It is proposed that the companies*

- *Blohm+Voss GmbH (B+V) as lead shipyard*
- *Howaldtswerke - Deutsche Werft AG (HDW) as partner shipyard*
- *Altech Defence Systems (Pty) Ltd. as nominated RSA combat suite contractor*
- *Thyssen Rheinstahl Technik, GmbH as trade house*

*will form the **South African Patrol Corvette Consortium** (SAPCC) in order to act as vessel contractor and to accomplish the below mentioned activities.*"

318. As it transpired, both ADS and Thomson-CSF joined the German Frigate Consortium in the European South African Corvette Consortium (ESACC) which is the prime contractor for the Corvette acquisition.

319. I believe that the GFC and Thomson/ADS have joint and several responsibilities with regard to performance of the Corvette contract.

320. I thus contend that, by virtue of ADS and Thomson-CSF's contractual relationship with the GFC, that Mr Shaikh's conflict of interest extends to the entire Corvette programme from the date of 11th May 1998, if not, then from the 18th November 1998, i.e. when the GFC was declared preferred supplier for the Corvette.

321. I also wish to refer to VAdm Simpson-Anderson's testimony at these hearings on 14th June 2001. In this regard, I refer to his letter dated 17th October 2000 addressed to the Secretary of Defence, Mr January Masilela, dealing with Mr Shaikh's conflict of interest, the contents of which he affirmed under oath.

322. In his testimony VAdm Simpson-Anderson alleged that Mr Shaikh recused himself on every occasion when there was a discussion on the Combat Suite and that this was minuted. I submit that the minutes of the PCB Meeting of the 24th August 1999 show that this is not so.

Conflict of Interest : Submarine Combat Suite (Project Wills)

323. Project Wills is the Submarine acquisition programme.

324. Regarding, Mr Shaikh's supposed recusal from all matters involving ADS and Thomson-CSF, the DoD documents to SCOPA record the following :

"*First PCB minutes Par 5. CAcq informs of conflict of interest....recused from CS decisions of both Wills and Sitron*".

325. ADS had developed a number of combat suites for the SA Navy's Daphne-class submarines and were very interested in providing a combat suite for the Type-209 submarines once the Upholders submarines offered by the United Kingdom fell out of contention.

326. Moreover, once Thomson-CSF took over ADS, they were very keen to supply a combat suite from a Thomson-CSF subsidiary called Underwater Defense Systems (UDS), with some sub-systems being supplied by ADS.

327. However, the SA Navy were not at all keen to get another ADS submarine combat suite and therefore the supply terms of Project Wills were structured such that the submarine would be supplied as a complete working system inclusive of combat suite, the choice of which would be that of the vessel contractor.

328. ADS and Thomson did all that they could to overturn this condition of the supply terms and it would appear that Mr Shaikh supported them in this endeavour despite his conflict of interest.

329. In this regard, I refer to a meeting of the South African Submarine Industrial Cluster (SASUBCLUB) held on 26th June 1998, where it was reported that :

"*The chairman informed the meeting that Atlantis Consulting (Pty) Ltd had been requested to attend a meeting with ADS on 30/6/98, being facilitated by Adm Howell and Mr S. Shaik (sic). As this meeting would have a direct bearing on the SASUBCLUB, the meeting was requested to give Atlantis Consulting (Pty) Ltd a mandate to negotiate depending on the direction of the meeting.*

It was agreed that should the SASUBCLUB be approached to include ADS, that ADS should be considered on the same grounds as any other applicant. These conditions include that no founder member loses workshare to ADS, ADS would become an associate member and that ADS agree to a quid pro quo with the SASUBCLUB wrt to workshare should a French offer be accepted as prime contractor for the Submarines."

330. On the 2nd July 1998, the secretary of the SASUBCLUB reported back to its members concerning the meeting of 30th June 1998 by means of a fax wherein he stated :

"<u>SASUBCLUB Membership</u>

ADS: As tabled at our last meeting , and with the mandate given to attend the meeting called by Adm. Howell with ADS, we report back the following :

Date : 30 June 98

Venue : Secretariat of Defence, Pretoria

Attendees : Dir. Acquisition Mr. S Shaik Chairman

SA Navy	*Adm. Howell*
Armscor	*Mr K Hannefey (sic)*
SASUBCLUB	*Mr G Blackbeard, Mr B. Blackbeard*
ADS	*Mr P. Moynot, Mr D. Hiles*

Meeting resolution : ADS is to join the SASUBCLUB within the confines of their stated role. The SASUBCLUB will negotiate to ensue (sic) an equitable workshare dependant (sic) on the SA Navy's selection of submarine and combat suite. No workshare will be lost to SASUBCLUB Founder members by inclusion of ADS."

331. On the 19th August 1998 another SASUBCLUB meeting was held, on this occasion with Messrs Pierre Moynot and Duncan Hiles of ADS. Mr Hiles reported the following to the meeting as reflected by the minutes :

"*Mr Hiles traced the relevant ADS history back to the Daphne Submarine upgrade projects, confirming that one Combat Suite had already been delivered and that ADS was awaiting a contract to install a Combat Suite onboard the SAS EMILY HOBHOUSE. He explained that the delay was due to the current moratorium on contracts exercised by Armscor and the SAN.*

Mr Hiles also stated that ADS had not expected the acquisition of new submarines to materialise and had only concentrated their efforts on supporting and modifying the Upholder submarines, should they have been purchased.

Mr Hiles informed the meeting that ADS had been caught "flatfooted" by the initiative taken by Atlantis and the SASUBCLUB and that they only became aware of the Cluster when it was advertised in the press in May 1998.

With respect to the selection of Combat Suite, Mr Hiles stated that the Chief of the Navy had confirmed to ADS that their Combat Suite would be fitted on board the new submarines. He re-iterated that this was also stated at the special meeting called between Atlantis and ADS on 30 June 98, chaired by Mr Shaik.

Mr Hiles presented the Project Nickles Combat Suite as developed by ADS and then presented the Project Wills Combat Suite that ADS/Thomson now propose for the new submarine.

In closing, Mr Hiles indicated that ADS saw synergy with the SASUBCLUB but also saw certain conflict areas which should be addressed."

332. I contend that Mr Shaikh actively campaigned on ADS's behalf in order to make up the ground that they'd lost by not expecting the acquisition of a new submarine.

333. However, this was not the only intervention by Mr Shaikh regarding the submarine combat suite. I know that he called Messrs Peter Krollman and Ernst-Otto Max of STN Atlas Electronik into his offices following the industry briefing on either 23rd November 1998 or 21st July 1999. I happened to see them straight after this and they were very, very shaken. They told me that Mr Shaikh had put a lot of pressure on them regarding the Submarine Combat Suite.

334. I have also been told that Mr Shaikh had various meetings with Mr Clements Steinkamp of HDW, the German submarine shipyard regarding the Submarine Combat Suite.

335. Although HDW chose the STN Atlas submarine combat suite and included this in their offer whereby they were declared preferred supplier for the submarine, they were subsequently forced by the DoD to also make an offer for the ADS/Thomson/UDS submarine combat suite.

336. However, although HDW complied with the DoD's demand of providing a offer including an ADS/Thomson/UDS combat suite, they stood firm regarding their preference of the STN Atlas combat suite, which was eventually finally selected.

337. Nevertheless, this did not stop the DoD trying to get STN Atlas to use ADS for defence industrial participation. At one stage, I believe that the DoD suggested that ADS manage all the local submarine combat suite DIP for a management fee of some R10 million. I was told that Mr Shaikh made this proposal at a meeting of the Project Control Board, but that was rejected. Later, it was decided that ADS should at least provide the torpedo fire control system for the submarine.

338. In this regard, Messrs Alfred Schulte and Ralf Gampe of STN Atlas especially flew out from Germany to meet with Mr Pierre Moynot of ADS at their head office in Midrand. When they got there they found Mr Moynot not even available, although he later turned up. I believe that he told Messrs Schulte and Gampe that they "*were not interested in crumbs*".

Conflict of Interest : FBS

339. Furthermore it appears as if Thomson-CSF, deliberately bought out Altech to gain control of ADS at the crucial time when the process regarding the award of the contracts was underway. In fact, it would appear that this was planned from 1997 and possibly as early as 1994 with the knowledge and/or direct involvement of Schabir Shaikh. I believe that previous directors of Nkobi Holdings during that period may be able to provide some insight into this matter.

340. It should also be mentioned that Thomson-CSF, which thereafter purchased 100% of the shares in ADS, thereafter sold or gave 20% of the shareholding to Futuristic Business Solutions (Pty) Ltd (hereinafter referred to as FBS), a company that has, or at least had then, little or no capacity or experience in the field of defence electronics or logistics.

341. Regarding FBS, the four directors and shareholders of the company are Lt Gen (Retd) Lambert Moloi, Tshepo Molai, Yusuf Mahomed and Ian Pierce.

342. Lt Gen (Retd) Lambert Moloi is the former Chief of Staff of Umkhonto we Sizwe (MK) and former Minister of Defence Joe Modise's brother-in-law. Joe Modise is the former commander in chief of MK. Tshepo Molai is Moloi's son-in-law.

343. I believe it is interesting that when Yusuf Mahomed completed the statutory forms for the founding of FBS, he supplied his postal address as P.O. Box 1002, Parkmore, 2002, which was also the postal address of Ian Pierce and Associates, an accounting company. He supplied an address of No. 1 Highbury, 3rd Avenue, Killarney as his residential address.

344. Mr Shamin (Chippy) Shaikh also owns a company called SI International (Pty) Ltd. When he completed the statutory forms for the founding of this company, he supplied his postal address also as P.O. Box 1002, Parkmore, 2002, again the postal address of Ian Pierce and Associates. He supplied an address of No. 10 Highbury, 3rd Avenue, Killarney as his residential address.

345. It appears from the above that there were very close links between Mr Shaikh, Mr Mahomed and Mr Pierce and therefore possibly between FBS and Mr Shamin Shaikh.

346. I would therefore contend that it is not beyond the bounds of possibility that there could be links between Mr Shaikh and FBS.

347. Some of FBS's contracts relating to the Strategic Defence Packages are in the field of logistics and they apparently teamed up, or are teaming up, with Logtek (Pty) Ltd to form Applied Logistics Engineering (ALE). Logtek has apparently taken over Conlog (Pty) Ltd, which has apparently been taken over by a French company called Schneider Electric. Schneider Electric, among other things, builds electric motors for diesel-electric submarines, including those for the SAN's Daphne-class submarines.

348. Schneider Electric is also the, or one of the, preferred suppliers of electric motors for diesel-electric submarines built by the Kokums shipyard in Sweden, which is in turn owned of HDW of Germany, the shipyard building the submarines for the SA Navy.

349. Regarding the German Frigate Consortium, the company Thyssen Rheinstahl Technik GmbH is a member thereof. Thyssen apparently entered into a contract with FBS to "*lobby and market Thyssen, its products and services to the relevant decisions makers*".

350. The contract requires that :

"*FBS takes upon itself to use its established network to lobby and market THYSSEN, its products and services to key decision makers within the Government of South Africa or any of its departments or ancillary bodies including but not limited to the Department of Defence, Armscor, Arms of Service of the South African National Defence Force, the Joint Standing Committee on Defence, The Department of Trade and Industry, Parliament and/or the Defence Industry as a whole with the aim of having THYSSEN viewed in a positive light during the adjudication of tenders for the programme.*"

And that :

"*FBS undertakes to use their best endeavours to secure for THYSSEN the desired contracts on the best terms possible*".

351. Thyssen is, or was, a member of the German Strategic Alliance, as was Daimler-Chrysler Aerospace.

352. I contend that while it is legal to lobby on behalf of another company, that in the context of the Strategic Defence Packages, it would be higher irregular for parties linked to highly placed decision makers to do so, or at least be allowed to do so, "*during the adjudication of tenders for the programme*."

353. Nevertheless, it is clear that FBS now owns 20% of ADS and it would appear to me to be obvious that this was the idea once Thomson-CSF had purchased the first 50% of ADS from Altech. In fact, Pierre Moynot says in a letter dated 19th June 2000 that :"

"*as a result of negotiations with them for the previous five months, Thomson-CSF International sold 20% to FBS on June 22nd 1999*".

354. Now all of Thyssen, GFC, Thomson-CSF and ADS are members of the European South African Corvette Consortium (ESACC). As Chippy Shaikh had acknowledged hin conflict of interest with ADS and Thomson-CSF, then by logical extension, this conflict of interest extended to the entire Corvette, at least from February 1999.

355. It appears that a similar exercise, in terms of which control in a South African company is taken over by a foreign company, who then sells or gives a percentage of its shares to a black-owned company, may have happened with Reumech OMC. In this regard, Reumech OMC was recently bought by Vickers PLC of the United Kingdom to form Vickers OMC (Pty) Ltd.

Predation of Other Segments by Thomson-CSF

356. The other 12 or so nominated sub-contractors got their contracts in the Corvette Combat Suite, except that Grintek Electronics, who was originally nominated to supply the South African-built Ship's Communication System (SCS), with the switching technology being provided by Plessey South Africa, was directed by the DoD to replace this with another system, the FOCON-32 internal ship's communication system, from a Thomson-CSF Group company called Thomson-Signaal.

357. As said earlier, the Combat Suite also originally included two sub-systems called the Action Information System (AIS) and the Weapon Control System (WCS), the latter being derived from the Target Designation Assembly (TDA). Both the AIS and the TDA were developed by ADS for the SAN's strike craft, with both being working systems. However, when Thomson-CSF bought ADS, the latter suddenly contended that the AIS and WCS sub-systems would not meet the requirements of the Corvette and that both sub-systems would have to be replaced by a Thomson-CSF Combat Management System (CMS); this is despite the fact that many millions of Rands of South African taxpayers' money had been spent by ADS on the development of AIS, WCS and TDA sub-systems.

358. As far as know, the only deficiency in the AIS/WCS combination was precipitated by the SA Navy's subsequent decision not to use the strike craft's ELM2208 search radar for the Corvettes. This radar was in fact becoming obsolete and in any case only had two-dimensional search capability which is limiting considering the threat of modern anti-ship missiles. The SAN therefore decided to acquire modern three-dimensional surveillance and tracking radar. The AIS and WCS had only been designed to handle two-dimensional radar data, specifically with regard to Threat Evaluation and Weapon Assignment (TEWA). However, I believe that it was quite feasible for ADS to acquire the TEWA capability from Thomson (or a number of other possible sources) and integrate it into their AIS and WCS. I cannot believe that it became necessary to replace the AIS and WCS with R335 million worth of Thomson-CSF's Tavitac Combat Management System.

359. I believe that the SAN allowed ADS to change the Corvette Combat Suite baseline in order to allow Thomson-CSF to supply their CMS.

360. Another aspect which I believe to be significant and to which I wish to refer, relates to the following three sub-systems of the Corvette Combat Suite, namely :

    1. The Surveillance and Target Acquisition Radar (STAR).

    2. The Surface-to-Surface Missile (SSM).

    3. The Hull-Mount Sonar (HMS).

361. Three foreign systems were initially baselined, i.e. they were preferred by the SA Navy in terms of capability and affordability, namely :

    1. The TRS-3D/16 STAR from DASA of Germany.

    2. The RBS-15 Mk3 SSM from Saab of Sweden.

    3. The ASO 93 HMS from STN Atlas of Germany.

362. However, at the end of the selection process they were all replaced by French companies, namely :

    1. The MRR STAR of Thomson-CSF of France.

2. The Exocet MM40 SSM of Aerospatiale-Matra of France.

3. The Marconi 4130C1 HMS of Thomson-CSF of France.

363. I believe that it is significant to note that Aerospatiale-Matra is part of the European Aeronautic Defence and Space Company (EADS). However, 46,5% of Aerospatiale-Matra is owned by Dassault Industries of France, while Thomson-CSF now owns 100% of Dassault Electroniques, which until quite recently was part of Dassault Industries, which in turn owns 6% of Thomson-CSF.

364. It would seem clear that the whole process, under the cover of the declaration of the GFC as preferred supplier of the Corvette negated the requirement for a formal tender process for the Corvette Combat Suite, ensured that French companies and specifically, Thomson-CSF, received the lion's share of the Corvette Combat Suite supply contract.

365. The price of the Exocet SSM contract at R200 million appears to me to be very low. Possibly this only included only the initial supply of the Deck Launching System and Fire Control System onboard the vessels, as well as integration and qualification. Possibly the missiles themselves are not included in this price. Original scope of supply at R1,47 billion for the Combat Suite included 32 missile rounds as well.

366. If this is the case, it implies that there will be extensive future costs in supporting the Corvette Combat Suite, over and above the acquisition cost.

Date of De-Selection Decision

367. I have already referred to the DoD's evidence to SCOPA that the decision to select the Detexis CSDB in preference to the IMS was made at the PCB Meeting of 24th August 1999. I pointed out in my earlier evidence that this was not supported by the minutes of that meeting.

368. I now refer to the letter dated 23rd August 1999 from Mr Pierre Moynot of ADS to my attorneys HGB. Here Mr Moynot states the following :

"*Our client then decided to choose the second option rather than the one by your client*."

"*Anyway, as said earlier, the choice has been made by the State and I see no way I could re-instate your client in the project unless the State decides otherwise and agrees to pay the extra 40 millions Rand.*"

369. It appears from Mr Moynot's letter that the PCB did not, in fact, make a decision concerning the IMS on the said day. It is not clear who the participants were in that decision.

370. It seems therefore, that the PCB itself did not actually make a decision concerning the deselection of the IMS at the meeting of 24th August 1999 and nor did they ratify anybody else's decision. The minutes suggest that the matter was to be a matter of further discussion, inter alia, with me.

Armscor and SAN approaches to C²I² Systems

371. The minutes of the PCB meeting of the 24th August 1999 record that :

"*c. Mr Swan and R Adm Howell will meet with Mr Richard Young to discuss the matter with him (Mr Swan and R Adm Howell for action).*"

372. The DoD's written response to the SCOPA hearings of 11th October 2000 also states the following :

"*It was additionally decided at the PCB on 24 August that the CEO of Armscor, Mr L. Swan and Rear Admiral Howell of the SA Navy should meet with Mr R. Young of C²I² to explain the situation to him as he was threatening legal action. This meeting took place in September 1999 in Simon's Town, and the discussions of the meeting was reported to the next PCB on 6 October 1999. It was indicated that Mr Young was not in a position to carry the cost associated with such a risk premium and would not pursue any legal action at that stage.*"

373. It is true that such a meeting took place, either on 27th August 1999 or 3rd September 1999.

374. The meeting was at the request of Armscor and was set up by Mr K.P. Hanafey, the Divisional Manager of Armscor's Maritime Division on behalf of Mr Swan. Although I requested an agenda for this meeting in advance, I was not provided with one. For this reason I took my then Personal Assistant, Ms Bernice Meyburgh, to the meeting to assist me with taking minutes and to also be aware of the discussions to take place. As it transpired, the interaction with Mr Swan and Rear Admiral Howell was more of a discussion with it taking place in an ante room of Admiralty House, without even a table to assist Ms Meyburgh with taking notes, etc.

375. It soon transpired that the real reason for Mr Swan calling this meeting was to request me not to proceed with legal action against Armscor and the DoD as this would not only disrupt the SA Navy's Corvette Programme, but could also potentially derail the whole Defence Acquisition Programme, that is according to Mr Swan and RAdm Howell.

376. As I considered it to be reasonable to negotiate with the Department of Defence and ADS to reinstate C²I² Systems in the Project without incurring the necessity and expense involved in litigation, I agreed not to proceed on the express condition that Armscor, the Department of Defence and SA Navy would persuade ADS and Thomson CSF to reconsider their position and include the IMS for the SA Navy Corvette Programme or otherwise make good the losses which C²I² Systems would suffer. Mr Swan agreed to take this matter further in this light.

377. I have already referred to the evidence of Mr Shamin Shaikh, given to SCOPA in an accompanying document, that C²I² Systems had been asked for and refused to provide a performance guarantee. It was alleged there that the request for such a guarantee had been made at this meeting with Mr Swan and RAdm Howell.

378. However, I deny that Mr Swan or RAdm Howell asked me to provide a risk premium or performance guarantee for the Combat Suite. The essence of their desire to meet with me was to ask me not to take legal action. After I had acceded to this, the business of the meeting was essentially complete, however we continued to make "small talk" for another 20 minutes or so. During this time Mr Swan did bring up the matter of the prime contractor providing a performance guarantee for the entire vessel. He said that if he were the CEO of ADS or Thomson, then he would ask me for a performance guarantee for the entire R6 billion Corvette contract, which would imply us providing a performance guarantee of 5% of this amount or R300 million. I responded that there was no businessman in his right mind would offer a performance guarantee, in our case a bank guarantee, for R300 million on a supply contact

worth R43 million (including VAT). He agreed with me on this, emphasising that he was just making these observations in his personal capacity, not as CEO of Armscor.

379. I responded by saying that despite the fact that we could not and would not offer a performance guarantee of R300 million, I had already written three letters to the CEO of ADS, copied to him and to VAdm Simpson-Anderson , RAdm Howell and others to the effect that I was prepared to provide a performance guarantee for the IMS.

380. One of the documents submitted at the same time to SCOPA was a letter on the matter of performance guarantees from Mr Swan to Mr Chippy Shaikh dated 4th October 2000. I consider it necessary to read the entire contents of the letter :

"*Mr Llwellyn (sic) Swan*
ex CEO Armscor
Armscor Building
Pretoria
0001

4th October 2000

Mr Chippy Shaikh
Department of Defence
(Acquisition Division)
Private Bag X910
Pretoria
0001

RE DISCUSSIONS WITH MR RICHARD YOUNG

I would like to inform you that during 1999, I, together with Adm. Howell (of the SA Navy) had discussions with Mr Richard Young in Cape Town concerning the Management Information System (sic) for the corvette program.

The essence of these discussions revolved around the ability of the "contractor" (C2 12) (sic) - to provide the performance guarantees necessary to satisfy Armscor that C212 could and would perform the tasks as required by Armscor and the DoD.

What prevailed from the discussions was the fact that C212 was not in the position to provide the necessary guarantees. Armscor/DoD required from C212 that guarantee to the full value of the "Combat Suite" because that was the value of the effect that the MIS (sic) would have on the contract.

While Armscor/SAN recognised the contribution of C212 to the Combat Suite of the Corvette program of the development phase, it was not in a position to accept the risks attached to the C212 solution unconditionally.

Yours faithfully

(signature)

L R SWAN"

381. I find the following aspects of this letter strange :

- Mr Swan spells his own Christian name incorrectly.
- Mr Swan provides his designation as "ex CEO Armscor"
- Mr Swan provides his address as the "*Armscor Building, Pretoria*"

382. However, more importantly, the content of the letter refers to the "*essence of the meeting*" being to discuss the performance guarantees. This is incorrect. The essence of the meeting was for Armscor to request us not proceed with legal action. This is not even mentioned in Mr Swan's letter. This can be contrasted with the chronology submitted by the DoD to SCOPA which correctly describes the essence of the meeting as follows :

"*CEO Armscor reports (to the) Project Control Board that C²I² will not pursue legal action*".

383. That the letter is written over 13 months after the meeting in question and by someone long out of the employ of Armscor, would seem to indicate that its content was not so important at the time of, or immediately after, the meeting in question.

384. On 8th May 2001 I contacted Mr Swan by telephone about our meeting and "his" letter. He confirmed what I have stated above about the meeting, however could not remember the letter and asked that it be faxed to him. We did this under a covering letter in which we asked the following:

1. Is the letter genuine?
2. Is it your signature?
3. If the letter is genuine was it prepared and signed by you or was it prepared by the Department of Defence (or some other party and if so whom?) and were you requested to sign it?
4. If the letter was prepared by some other party and you were requested to sign it, under what circumstances was it signed?

385. On 16th May 2001, my assistant Marlene Abreu, contacted Mr Swan to ask him if he had received the fax. He confirmed that he had and said that :

"*this matter is getting out of hand*".

386. On the 29th May 2000, Mr Swan wrote to us on this matter saying that :

"Would you please desist from contacting me, as you are well aware that I am no longer an employee of Armscor or in any way associated with the Department of Defence or Armscor. "

387. In light of the aforegoing I seriously question whether Mr Swan actually compiled this letter.

Attempts to Resolve the IMS De-Selection with DoD and Armscor

388. As I deemed that the decision to deselect C²I² Systems as the nominated and selected supplier of the IMS to be both wrongful and unlawful, I immediately investigated all avenues of internal remedy before considering external remedy. This is addressed more completely in this section.

389. The *Programme Plan* for Project Sitron outlines the approach to be followed when executing the Project(Annexure Cxx) .

390. It is stipulated in Clause 6.2.1 of the *Programme Plan* that any person involved in the project had the :

"*RIGHT OF APPEAL*

It is a basic principle of the management of this project that any person involved in the project has the absolute right to appeal against any decision or action within the management of the project to the highest possible authority. This appeal should be addressed to progressively higher authority within the limits of the policies of the SADF and Armscor beginning with the Program Management structures as defined within this Program Plan."

391. In this regard, I therefore initially approached the Management of the Corvette Programme. The Management Team of the Corvette Programme consist of members of the SA Navy seconded to the DoD and of Armscor. They are known as the JPT.

392. After having brought the IMS de-selection matter to the attention of Mr L.R Swan, CEO of Armscor, I believe he realised that there was a problem on this issue. He eventually instructed his Senior Manager of Armscor's Maritime Division, Mr K Hanafey to intervene with the objective of satisfactorily resolving this matter between the relevant parties, specifically ADS, Thomson-CSF and C²I² Systems, but also the JPT and the DoD.

393. To this end Mr Hanafey convened a meeting between these parties which was held at Armscor, Pretoria on 17th June 1999. Mr Hanafey suggested that each party give a short presentation, after which we could see whether we could find common ground for a satisfactory solution to the problem. We also prepared and agreed on an agenda in advance.

394. My partner, Gerhard Krüger and I flew up to Gauteng from Cape Town especially for this meeting, which lasted about 30 minutes.

395. The meeting started on a very poor note with then-Capt Kamerman and Mr F. Nortjé arriving late and highly irritated, complaining that we were wasting their time and that "*they were online to Germany*" regarding the Corvette contract negotiations at that time.

396. I did not receive the minutes or "*Confirmatory Notes*"(Annexure Axx) of the meeting until 4th September 2000 and then only after several attempts from my side, the last being a letter dated 30th August 2000 to the Director of Naval Acquisition of the DoD and the Manager, Maritime Division, Armscor(Annexure Axx). It should be noted that although the meeting took place on 17th June 1999, these *Confirmatory Notes* were only signed by Mr Hanafey on 15th February 2000.

397. During the meeting I raised the question as to whether the IMS of C²I² Systems had been selected, and, if not, why not.

398. The minutes record that :

"*JK* [Capt Kamerman], *FN* [Frits Nortjé] *and LM* [Lewis Mathieson] *did not provide answers to the questions for fear of jeopardising the tender process.*"

399. There was no constructive response whatsoever from SAN and ADS.

400. With respect, the only sensible contribution to the meeting was the following from RAdm Howell who stated the following :

"*ANH stated that this was similar, in certain aspects, to the submarine in that a system was decided upon and the only fair way is to assess it technically and commercially and inform people of the decision.*"

401. I wholeheartedly agreed with that view. However, the DoD did not practice what it preached. Despite the Project Team having performed such a review of the IMS only two weeks previously, the evaluation team's recommendation was disregarded.

402. Regarding a fair commercial assessment of the IMS, I believe that there was nothing fair about the adding of R40 million to our price based on unfounded assertions of "risk" without a risk audit even being undertaken.

403. I believe that there is also nothing **fair** to the taxpayer of this country about taking a foreign company's inferior product at R49 million when a superior indigenous product was offered at R38 million (excl. VAT).

404. Regarding a fair commercial assessment of the SMS, which I did mention briefly in my presentation to the meeting, I believe that there was nothing fair about adjusting the price of our SMS upward by 10% in favour of ADS's product and then still choosing the latter even when our price was lower, despite the unjustified adjustment.

405. Regarding "*informing people of the decision*" and Mr Hanafey's final conclusion of the meeting that "*all parties would be informed of the decisions in due time*", I believe that there is nothing fair about having to wait nearly for 15 months for the confirmatory notes of the meeting and nearly 16 months to be formally informed that the IMS had not been selected for the corvette Combat Suite.

406. After a meeting called by Mr Shamin Shaikh on the 21st July 1999, to which I refer elsewhere in my evidence, I was approached by him outside the meeting venue. He started off by asking me why I was disturbing the Corvette acquisition project by complaining about the deselection of the IMS. Although I wanted to reply, he stopped me from doing so and gestured for Mr Kevin Hanafey of Armscor to join us. Once he had done so, we retired into a corner of the room where we discussed the matter for some twenty minutes or so. Mr Shaikh was very aggressive with me, saying that if I had a problem, I should have spoken to him about it. I replied that, in terms of the *Programme Plan*, I was addressing this matter at increasing higher levels of authority and had not reached him yet. Anyway, I took up his offer and arranged to see him at a later date.

407. Accordingly, I flew up to Pretoria on 28th July 1999 to see Mr Shaikh at his offices. Also present were RAdm(JG) Ockie van der Schÿf and RAdm(JG) Keg Verster, neither of whom said anything during the entire meeting, except when Mr Shaikh left the room for about 20 minutes to attend to some other business when we exchanged some pleasantries. It was initially a very acrimonious meeting. Mr Shaikh firstly asked me to explain my problem to him which I did. His immediate response was to accuse me of many things, including of being "*arrogant*" and of being an "*agent of the apartheid regime*" (because of me having worked as an engineer for 7 years for UEC Projects).

408. He said to me that if I was challenging this decision, then in effect I was challenging the Cabinet and the President, because it was they who had taken this decision. While I know that Mr Shaikh briefed MINCOM on this matter, I was told that it had appeared that he only presented one side of the matter to them, i.e. not our side concerning nomination, selection, etc. and actually how far technically we were with the IMS. I was told that the Minister of Defence, Mr Lekota, was subsequently very angry about this.

409. During this meeting, I showed Mr Shaikh a copy of the *Element Costing and Description*, of which he was obviously completely unaware. He read it intently for about 15 minutes during the meeting, but did not initially offer any comment or conclusion on its contents.

410. During this meeting, Mr Shaikh asked me how big my company was in terms of annual turnover. When I told him, he told me that his department had a R50 million per year legal budget and I was "*welcome to take them on*", or words to that effect.

411. At the end of the meeting, Mr Shaikh instructed RAdm Verster to ascertain the total of all our current contracts with Armscor. I took this as a threat that if we should challenge the validity of deselection the IMS, then things could be made very difficult for us on other projects.

412. The meeting lasted for about an hour without there being any resolution.

413. Approximately an hour after I had left his office, I received a call on my cellphone from Mr Shaikh's secretary. She asked me whether I was still in the area, which I was as I was working in the AMD offices in the same building until I could catch my flight later that day. She requested on Mr Shaikh's behalf that I rejoin the meeting which was being reconvened just after lunch, i.e. about an hour later.

414. Also present at this time was Mr Moynot and a colleague, Danie or Dawie van der Walt from ADS, as well as the two admirals. We then dealt with my assertion that C²I² Systems had been nominated as the IMS supplier. Towards the end of the meeting, Mr Shaikh said to Mr Moynot that if what I said was the truth, he would happily pay the extra R42 million to include the IMS in the Corvette Combat Suite. Mr Shaikh suggested that Mr Moynot and I find a mutually acceptable solution to the problem.

415. Regarding this interaction with Mr Shaikh, when he testified at the SCOPA hearings of 11th October 2000 that he had nothing to do with the sub-contractors after the acquisition process had commenced until the contracts were signed, it was not true. Not only did Mr Shaikh have contact with me as I have described above, but it was he who initiated it, not the other way round.

416. Regarding C²I² Systems's de-selection, we wrote letters to the DoD who referred us to the GFC who referred us to ADS.

417. After many unsuccessful attempts to resolve the matter with DoD and ADS, I consulted with my attorneys HGB during July 1999 to ascertain my legal position concerning external remedy.

418. On 23rd July 1999, HGB sent a letter advising ADS, that C²I² Systems was in the process of being deselected as the nominated and selected sub-contractor for the IMS for the South African Navy Corvette Programme(Annexure Cxx) .

419. On 26th July 1999, Mr Pierre Moynot of ADS replied in a letter to HGB that it was the State who had made the decision(Annexure Cxx) :

"*In general I must stress that I have been quite surprised by all the noise made by your client around the selection process was entirely between (sic) the hands of the project team (composed of*

representatives of Armscor and the S.A. Navy) under the supervision of the Director of Acquisition from the Secretariat of Defence."

420. On 13t[h] August 1999, HGB addressed a letter to ADS advising that C²I² Systems's rights were being infringed and placed it on terms to confirm that C²I² Systems would be reinstated in the Project(Annexure Cxx).

421. On 23[rd] August 1999, ADS replied in a letter to HGB that it was the State who had made the decision(Annexure Cxx).

"*I would like to take the opportunity of your a.m. fax to clarify hopefully once and for all the matter in object.*

As I have already explained to your client in my office as well as in the office of the Director of Acquisition/Secretariat of Defence, when requested by the Sitron project team to quote for the IMS system we have presented two options, one of them being your client proposal.

The prices of these two options were (sic) taken into account the potential risks attached to each of them. In the case of the proposal by your client risks attached were far greater than for the second option for a number of reasons and hence the extra cost attached was more important than for the second one. A difference in price of about 40 million Rand was the result of the comparison. Our client then decided to choose the second option rather than one by your client. Consequently, should your client decide to pursue on this matter I suggest he addresses himself to the State rather than to me."

422. Mr Moynot concludes his letter as follows :

"*Anyway as said earlier, the choice has been made by the State and I see no way I could re-instate your client in the project unless the State decides otherwise and agrees to pay the extra 40 millions Rand.*"

423. Subsequently, during the period September 1999 to January 2000, I was contacted a few times by Mr Moynot to discuss the possibility of a joint collaboration with ADS and Thomson-CSF.

424. During January 2000, Mr Moynot requested that I come to ADS in Durban to discuss such a possibility. Telephonically, he would not give me any idea as to its details in advance.

425. During this meeting, Mr Moynot proposed the possible deployment of the IMS network within various strike-craft upgrades being considered by Thomson-CSF with ADS's involvement. This offer was conditional that the IMS had been qualified at sea within the SA Navy's Warrior Strike Upgrade Programme.

426. Since the IMS had been developed specifically for the Corvette, it did not form part of the Strike Upgrade Programme and thus could not be qualified at sea within this Programme. Mr Moynot could easily have ascertained this without my having to travel to Durban. I therefore contend that he wasted my time and money on this matter. I refer to the correspondence between myself and Mr Moynot dated 19[th] September 1999 and 18[th] October 1999(Annexure Cxx).

427. Nevertheless I did advise Mr Moynot that we had always recommended to the SA Navy that qualifying the IMS for the Corvette Programme, but on a strike craft, was an excellent and not extraordinarily costly way of doing so. Mr Moynot agreed and undertook to bring up this matter with the Chief of the Navy, Vice Admiral Robert Simpson-Anderson as well as the Chief of Acquisition, Mr Shaikh. I reminded Mr Moynot of this proposal in an email to Pierre Moynot dated 18[th] October 1999. I have never heard anything since further on this matter.

428. On the 1st November 1999, at the meeting facilitated by AMD, ADS agreed to hold discussions with C²I² Systems with the objective of reinstating the IMS in the SA Navy Corvette Patrol Programme. This meeting was attended by Let Gen (Retd) Lambert Moloi, Chairman of the ADS Board of Directors. Mr Moynot advised AMD that he could not attend. I reiterated my agreement not to take any action that would impede Cabinet authorisation of the Strategic Defence Packages in exchange for ADS's cooperation in negotiating a mutually acceptable resolution to the dispute. It was further agreed that another meeting between all the relevant parties would be held on 8th December 1999.

429. On 3rd December 1999 the South African Government signed Supply Agreements totalling R30,3 billion (at that time) to modernise its defence equipment.

430. On 8th December 1999, C²I² Systems attended a meeting facilitated by AMD with Armscor. ADS declined to attend due to the "*unavailability of members*". I submit, in retrospect, that as the South African Government had authorised the Defence Acquisition Programme, ADS's position was secure and it was no longer imperative to negotiate with C²I² Systems.

431. In January 2000, I reported the matter to the Secretary of Defence Mr J.B. Masilela and attended a meeting with him and Special Advisor to the Minister of Defence, Ms Sue Rabkin on the 26th January 2000. They advised me that the Ministry of Defence was initiating a complete investigation into the Arms Deal and this would include the circumstances surrounding the de-selection of the IMS.

432. During the period February 2000 to August 2000, I telephonically contacted Ms Rabkin on a number of occasions to find out what the outcome of Department's investigation were. She advised me that the Minister of Defence had indeed initiated this investigation, but that I must be patient as '*these things took time*'.Additionally, on a number of occasions, Ms Rabkin assured me that I was proceeding in exactly the right way concerning this matter.

433. On the 1st February 2000, I was telephonically advised by Mr Swan's successor, Mr Sipho Thomo, that Mr Moynot had recently advised him that "*all was in order*" concerning our dispute and that ADS had made a "*lucrative offer*" to us and were waiting for a response from us.

434. This was definitely not the case.

435. As I was convinced that the deselection of the IMS had been through irregular procedures, as well as becoming aware of conflicts of interest involving the Chief of Acquisition, I first decided to co-operate with the Special Investigating Unit (SIU) who had approached me in this regard.

436. During mid-June 2000, I stated gaining the impression that the SIU would not get the required proclamation. The SIU recommended that this matter be brought to the attention of the Auditor-General.

437. On 29th June 2000, I attended a meeting with members of the Auditor-General and the SIU in Pretoria where I advised the Auditor-General of the matter of the deselection of C²I² Systems's IMS.

438. Although I was confident that the AG understood my complaint, I subsequently had a telephonic conversation with Mr Wally van Heerden, Deputy Auditor-General. He advised me that the AG's office had come to an interim conclusion that my complaint fell into the area of subcontracting and that the AG had a mandate only to investigate matter involving prime contractors.

439. As I considered ADS and Thomson-CSF to be effectively at the prime contractor level I did not accept the position the AG had taken on this matter.

440. Therefore on 11th July 2000, I formally requested that the AG conduct a forensic audit into the circumstances of the deselection of C²I² Systems as the nominated and selected sub-contractor for the IMS for the SA Navy's Corvettes(Annexure Cxx).

441. On 25th July 2000, we received a letter from the AG formally advising us that my request for a forensic audit did not fall within the ambit of the regularity mandate of the AG's office. The AG elected to refer the matter to the Public Protector and to the Independent Directorate for Serious Economic Offences(Annexure Cxx).

442. In August 2000, I was advised by means of a letter from the Public Protector that they were investigating the matter and would inform me of the outcome in due course.

443. We had two meetings with Mr Shaikh in early September 2000. I am advised that these discussions may perhaps be regarded as without prejudice settlement discussions and I shall accordingly not say more about them. What I can say however, is that in one of the meetings Mr Shaikh informed me that the decision to deselect the IMS had been that of the Chief of the Navy.

444. On 25th October 2000, I attended a meeting with Adv. Dave Scrooby and Adv. Gary Pienaar of the Public Protector regarding the investigation into the Strategic Defence Packages. Here I briefed them fully on my complaint regarding the IMS's de-selection.

445. On 3rd November 2000, I received an email from Mr Swan advising that due to the fact that the matter had been reported to the Auditor-General and that Mr Shaikh consequently had to appear before SCOPA on 11th October 2000, the matter had "*gone too far to reach an off-the-record*" solution and now had to "*run its course*"(Annexure Cxx).

446. On 9th November 2000, Ms Rabkin requested that I submit an affidavit to the Minister of Defence, the Honourable M. Lekota, concerning the approaches made to me in Pretoria by Mr Shaikh during September 2000 which I did.

De-Selection: A Decision of the State

447. After C²I² Systems's de-selection, we wrote letters to the DoD who referred us to the GFC who referred us to ADS. On 23rd August 1999 ADS eventually replied in a letter to my lawyers, HGB that it was the State who had made the decision.

448. The assertions made by ADS in their various letters to me that it was the State that made the decisions regarding the selection of equipment for the Corvette, seem to be corroborated by the letter of Mr L.R. Swan, the then Chief Executive Officer of Armscor, dated 29th June 1999 to the German Frigate Consortium, which reads as follows :

"Project Control Board Decision regarding the Project Sitron technical baseline:

1. *At a meeting held recently regarding the selection of major products and their suppliers for the Corvette programme, the following were selected - see attached list.*

2. *Kindly inform all suppliers concerned, of the above decision* ".

449. Furthermore, no one representing the State has ever told me that that was not the position.

450. I only received formal notification from the DoD of the reasons why C²I² Systems's IMS was de-selected on 6th October 2000.

451. Mr Shaikh personally informed me in September 2000 that the IMS had not been selected because of the decision by the Chief of the Navy. He repeated this assertion before SCOPA. I accordingly sent a letter dated 18th October 2000 to the Chief of the Navy, inquiring about the reasons for his decision(Annexure Axx). I got no reply.

452. As VAdm Robert Simpson-Anderson had retired at the end of October 2000 I wrote to his successor, VAdm Johan Retief, however he would not supply reasons(Annexure Axx).

453. I also got a letter from RAdm Howell who referred me to Armscor(Annexure Axx).

454. It is also certainly logical that the State must have made the decision, in view of the fact that the decision to rather select the Detexis system was a complete deviation from what was originally envisaged and from the URS. In fact, Mr Shaikh personally told me that this decision was taken or ratified by the Cabinet.

455. Finally I received the letter from the Director of Naval Acquisition, RAdm Ockie van der Schÿf on the 6th October 2000 in response to my question raised at our meeting on the 17th June 1999, i.e. 16 months later. In this letter, RAdm van der Schÿf makes the following important points as follows :

"*Therefore due to financial constraints of the project, the Combat Suite selection process essentially became a "**design to cost exercise.**"* (my bold emphasis).

"*Furthermore, the combat systems had to be offered against the **approved SA Navy Combat Suite User Requirement Specification**, which is a **functional** specification*" (my bold emphasis).

"*It is therefore re-iterated that the Combat Suite databus selection for the Patrol Corvette, namely that from the supplier Detexis, was considered by the DOD to be both technically acceptable, as well as being the most viable option amongst the offered alternatives within **the approved project cost ceiling** and an acceptable contract risk profile.*" (my bold emphasis).

456. RAdm van der Schÿf is wrong when he claims that the URS is a **functional** specification. It is a complete all-encompassing specification, including all functional and engineering requirements, as well as Customer-Furnished Equipment (CFE) and Customer-Specified Equipment (CSE), which happened to include the IMS. It is also wrong to assert that the Detexis system was found to be "technically acceptable". The report of the evaluation team indicates just the opposite.

457. RAdm van der Schÿf also states in his letter of 6th October 2000, the following :

"*Thus, CCII was only a candidate supplier during the RFO and BAFO rounds of combat suite tendering, with no supplier being implicitly or explicitly nominated or excluded.*".

458. I would contend that, with reference to both the URS and the *Element Costing and Description*, this statement is clearly incorrect.

459. I did reply to this letter in my letter of 9th November 2000 where I enquired whether he was referring to the URS and requested that I be supplied with the document number and specific issue of the document to which he was referring.

460. I have still not received a response to this letter.

461. However, about two weeks later, I received a phone call from Mr Shaikh who apologised for not responding to me sooner, but that he had just received the letter that day. This may be so, but, apart from sending the original by mail, I personally faxed this letter to both RAdm van der Schÿf's fax and to Mr Shaikh's fax, with my fax machine printing out a confirmation report that transmission had been successful in both cases. Nevertheless, Mr Shaikh said that he took my request seriously and that he would instruct RAdm van der Schÿf to respond to me immediately. Suffice to say, I have still not received a response nearly a year later.

True Objectives of the Strategic Defence Packages

462. After the authorisation in principle of the SDPs and the announcement of the preferred main contractors, Mr Shaikh a supplier's meeting of 23rd November 1998. At this meeting Mr Shaikh said that they, that is he and the government, did not care if the ships (i.e. Corvettes) arrived at Simon's Town (I presume he meant towed) without engines. In fact he said that if the Corvettes could actually put to sea and fight, that this would be the "*cherry on the top*" (his words in italics). He also said that if the price of the Combat Suite was too high, that they might reduce the number of Corvettes from four to three.

463. Mr Shaikh called another meeting of suppliers on 8th February 2000, During this meeting, a presentation was given by Mr Dewald Jooste of Armscor on the subject of technology transfer in respect of Defence Industrial Participation (TDIP). On completion of the presentation, I raised a question as to the objectives of TDIP as this had not been addressed and was important in respect of the TDIP being negotiated between ourselves as local recipients of technology under TDIP from our overseas partners within the submarine acquisition programme. As Mr Jooste could not or, would not, answer my question, Mr Shaikh took over and effectively told me that "*there were absolutely no defence strategic reasons for TDIP*", the only reason for TDIP being to support countertrade. Apart from being aggressive in the extreme when answering my quite legitimate question, I found Mr Shaikh's answer very disturbing. In fact, at the end of the meeting, the Programme Manager of the submarine project, Mr Rob Vermuelen, effectively negated Mr Shaikh, his superior, by saying that the prime reason for TDIP in the submarine programme was to facilitate long-term supportability and upgradeability, which were strategic requirements of the SAN.

464. Consequently, I find it interesting that Mr Shaikh tried during the SCOPA hearings of 11th October 2000 to justify the defence equipment acquisitions as being primarily being a result of actual defence requirements. The Minister of Trade and Industry, Mr Alec Erwin, again made this assertion during this press conference of 12th January 2001 as well as the SCOPA hearings of 26th February 2001.

465. This certainly does not correspond with the Department of Defence's Chief of Acquisition's previous pronouncements in this regard.

Cost "Ceilings"

466. Now, concerning RAdm van der Schÿf's assertions about cost ceilings for the Corvette and/or its Combat Suite, I find this quite significant considering the DoD's response as to why the extra R40 million risk apportionment added by ADS was sufficient to cause the deselection of our IMS.

467. This assertion about a cost ceiling was also made by Mr Dawie Griesel on 13th June 2001 earlier during these hearings. He made the following particular statements :

"*there was also an interaction with the technical teams due to the fact to the, during the negotiation process the costs had to be negotiated to get under a predetermined ceiling*"

And :

"*that was then necessary to interact with the technical teams in their technical negotiations with the respective bidders to ensure that the ceiling which was given was not superseded.*"

468. In this regard, VAdm Simpson-Anderson gave the following testimony on 14th June 2001 earlier during these hearings :

"*The Naval Board had previously decided not to compromise unnecessarily on the numbers and the quality of the platforms, since they had to last 30 years, possibly even longer. Compromises therefore had to be made in the area of the combat suite. That is that part of the ship that can be upgraded and added to as and when necessary. And since the project had a funding ceiling, the combat suite would be designed to cost dependent on the balance after the platform cost had been deducted from the ceiling. So with whatever was left we had to go and then find a combat suite.*"

469. After the announcements of the SDPs and preferred suppliers on 18th November 1998, I attended a meeting, called by Mr Shamin Shaikh and Mr L.R. Swan, with the preferred system and sub-system suppliers on 23rd November 1998.

470. Statements along these lines had been made by Mr Shaikh and Mr Swan at a the supplier's meeting that I had attended on 23rd November 1998. I took notes of this meeting as follows :

Mr Shaikh

"(All the packages have) *fixed ceiling prices - not one rand more* (will be allocated to them)"

"*If anything, price may come down*"

Mr Swan

"*Armscor/SA Navy have a specific amount of money* (for the packages). *We have to come in at that*"

"(The ceiling price of the) *Corvette Combat Suite is R1,4 billion*"

"*Local companies are naive in negotiating contracts with overseas companies. Armscor can assist local companies in negotiations.*"

RAdm Howell

"*The simultaneous Corvette and Submarine acquisition programmes offer a fantastic opportunity for maximising commonality in terms of supportability, maintainability, upgradeability and* (local) *design capability (in at least critical areas)*"

"*The Lynx helicopter is a critical part of the Corvette* ***weapon system***"

471. I would like to examine the true facts of the matter.

472. On the 18th November 1998, the Cabinet approved in principle the Strategic Defence Packages and announced the selected preferred suppliers as follows :

Quantity Approved	Equipment	Acronym	Cost
28	Advanced Light Fighter Aircraft	ALFA	R10 875,00
24	Lead-In Fighter Trainer	LIFT	R4 728,13
40	Light Utility Helicopter	LUH	R2 168,75
3	Coastal Submarine		R5 212,50
4	Patrol Corvette	SAN PC	R6 001,25
4	Maritime Patrol Helicopter	MPH	R787,50
	Total (Rands Billions)		**R29 773,13**

Table 1 : SDP Approved Cost Ceilings

(28 x ALFA @ R10 875,00 million plus 24 x LIFT @ R4 728,13 million = R15 603,13)

The Corvette had a nominated Combat Suite with a nominal cost of R1 470,00 million, but at April 1998 prices (R5,05 = US$1,00). By November 1998 this had escalated to R1 800,00 million (R6,25 = US$1,00).

The total approved cost of the package was R29 773,13 million or R29,773 billion, @ 1998 prices, apart from the Corvette Combat Suite which was "*in predicted April 1998 Rands*".

This total included all costs, including statutory, importation, transportation and programme management costs, but not financing costs.

For the ceiling cost of the Corvette Combat Suite, the following was applicable :

"*The ceiling costs includes the entire scope of supply of the Combat Suite Element in terms of the management, products and services described herein, including all RSA taxes and duties*".

473. I find it interesting to note that the GFC offered a choice of two Corvette platforms, i.e. the MEKO 200 at US$949,5 million and the MEKO A200 at US960,2 million (both prices inclusive of Combat Suite), difference between these two options being US$10,7 or R66,9 million (at R6,25 = US$1,00). The

Government chose the more expensive A200 version, even though the IP values for both options were identical.

474. The MEKO A200 is more expensive because it includes a waterjet propulsion system. However, this had never been done on a frigate or corvette before, or at least Blohm+Voss had not done so, so it constituted a not insignificant risk. However, this dis not stop the DoD or SAN from choosing this option.

475. I have been told that this option was chosen by the SAN because they considered it strategically advantageous in the long term; but this was also the reason for fitting a high-performance, modern fibre optic local area network into the vessel.

476. The price for the 590B corvette offered by Bazan of Spain was US$832,2, nearly US$130 million less than the MEKO A200, while Bazan's Industrial Participation (IP) offer was more than US$400 million more than the GFC's IP offer.

477. On 24th November 1999, the Cabinet approved contracting for the Strategic Defence Packages with the original selected preferred suppliers as follows :

Quantity Contracted	Equipment	Acronym	Cost
28	Advanced Light Fighter Aircraft	ALFA	R15 916,00
24	Lead-In Fighter Trainer	LIFT	
30	Light Utility Helicopter	LUH	R1 965,00
3	Coastal Submarine		R5 531,00
4	Patrol Corvette	SAN PC	R6 873,00
0	Maritime Patrol Helicopter	MPH	
	Total (Rands Billions)		**R30 285,00**

Table 2 : SDP Contract Prices

Quantity	Equipment	Acronym	Cost Approved	Cost Contracted	Delta
28	Advanced Light Fighter Aircraft	ALFA	R10 875,00	R15 916,00	R312,87
24	Lead-In Fighter Trainer	LIFT	R4 728,13		
30	Light Utility Helicopter	LUH	R2 168,75	R1 965,00	(R203,75)
3	Coastal Submarine		R5 212,50	R5 531,00	R318,50
4	Patrol Corvette	SAN PC	R6 001,25	R6 873,00	R871,75
0	Maritime Patrol Helicopter	MPH	R787,50		(R787,50)
	Total (Rands Billions)		**R29 773,13**	**R30 285,00**	**R511,87**

Table 3 : SDP Cost Ceiling to Contract Price Deltas

Quantity Approved	Quantity Contracted	Equipment	Acronym	Delta
		Approval to Contract Delta		R511,87
40	30	Light Utility Helicopter	LUH	R203,75
4	0	Maritime Patrol Helicopter	MPH	R787,50
		Total (Rands Billions)		**R1 503,12**

Table 4 : SDP Cost Ceiling to Contract Price True Increase in Real Terms

Equipment	Cost	Total
Local : ADS	R412 757 500	
Local : RSA Industry	R917 640 140	
Sub-Total : Local		**R1 330 397 640**
Foreign : Thomson-CSF	R522 109 591	
Foreign : Other Companies	R415 197 262	
Sub-Total : Foreign		**R937 306 853**
Sub-Total : ex. VAT		R2 267 704 493
VAT	14%	R317 478 629
Sub-Total : incl. VAT		R2 585 183 122
NDS ?		**R13 816 879**
Total		**R2 599 000 001**

Table 5 : Corvette Combat Suite Price Breakdown

Equipment	Cost	Total
April 1998 Cost Ceiling	R1 470 000 000	
RoE and CPI Escalation	R330 728 124	
Escalated Cost Ceiling		**R1 800 728 124**
Contract Price		**R2 599 000 001**
Delta : Approved Ceiling to Contract Price		**R798 271 877**

Table 6 : Corvette Combat Suite Price Increase Breakdown

[Slide - Corvette Combat Suite Price Breakdown]

The Corvette's nominated Combat Suite nominal cost could justifiably be escalated to R1,798 billion, at November 1998 prices (R6,25 = US$1,00).

The total cost of the package was R30,285 billion (still @ 1998 prices).

This total included all costs, including statutory (VAT and customs duties), freight, export guarantees and programme management costs as well as ECA premiums and the financing of the preferred cashflow.

478. Hence the cost increase in numeric terms from November 1998 to November 1999 was R511,87 million. However, because the Maritime Patrol Helicopters (MPHs) had been excluded and the number

of Light Utility Helicopters (LUHs) reduced from 40 to 30, the real cost increase is R1 503 million or R1,503 billion.

479. There had been a number of programmatic changes such as extension of the repayment period as well as loan financing which would lead to some increases in financing costs. However, it is clear from the analysis of the figures that such financing costs amount only a fraction of the extra R1,5 billion, while it is clear from the Corvette costing that the price of the Corvette increased by R872 million.

480. It is quite obvious that the price of the Corvettes increased by R872 million, in the main due to a R798 million increased cost of the Corvette Combat Suite.

481. The first conclusion is that there was no cost ceiling applied to the Corvettes.

482. The second conclusion is that the Corvette Combat Suite cost increased in real terms by R798 million.

483. In addition, the scope of supply of the Corvette Combat Suite had decreased from the baseline established by the *Element Costing and Description*. This is borne out by the Project Officer's (then-Capt Kamerman and Programme Manager's (Frits Nortjé) letter to the GFC and ADS dated 6th May 1999 :

"*10. Since the initiation of discussions in December 1998, the process between us thus far has been characterised mainly by reductions to the cost of the Vessel achieved by reductions of the scope of supply (quantity) or performance (quality) from that originally offered. The SA Navy is prepared to accept these reductions, and the considerable reduction in value that they represent, in the spirit of achieving an viable, affordable solution within the budgetary constraints of the project. They are reflected in Annexures A and B.*

11. Despite these efforts, however, the current overall price for the total vessel system to the Project (i.e. inclusive of taxes, duties, etc payable by the DOD and our own Project Management costs), still exceeds the overall Cabinet approved budget ceiling."

484. I contend that the reason offered by the DoD proves that the "justification" offered by the DoD for deselecting the IMS on the basis of remaining under a cost ceiling was unjustified.

485. I believe the following extract from the same letter places into perspective the dilemma into which the JPT had allowed themselves to be trapped :

"*You are reminded of the affordability imperative placed by the government on this acquisition relative to other equipment in the package and the likely consequences of a failure to achieve an affordable Corvette solution in the immediate short term to the probability or schedule of the Corvette acquisition.*".

What the Project Officer and Programme Manager were reminding the GFC, Thomson-CSF and ADS, was that the Corvette programme would be cancelled or postponed unless there was rapid contract closure.

486. Apart from this being a very weak negotiating position against a supplier effectively in a non-competitive position, I contend that this hardly supports the Government's latest pronouncements on the importance of the Corvette specifically, or the defences packages in general.

487. I believe that one of the reasons for the massive increase in price from the baseline described by the *Element Costing and Description*, to the final contract price, is the cost of Thomson-CSF's Tavitac CMS at R335 million. As this was essentially an "off-the-shelf" system, despite the need for the

requirement for customisation for the SA Navy. I believe this price to be very high. I would be interesting to compare this contract price to the original price estimates for the AIS and WCS, but I would estimate the combined price for these two elements to be no more than R150 million.

488. A second reason for this increase in price is the cost of Thomson-CSF and ADS's provision for R423 million for system integration, whereas the JPT had previously estimated about R150 million for this effort.

489. I contend that the DoD effectively sacrificed the four maritime patrol helicopters in order to facilitate the increase in the price of the Corvette Combat Suite.

490. It is well known that the combat capability of a modern surface combatant such as a frigate or corvette is severely diminished without an onboard maritime patrol helicopter. In my opinion, a navy would be hard-pressed to find a commanding officer who would take a frigate into combat without a helicopter. This means that the DoD will almost surely be acquiring these maritime helicopters in the near to medium term future. I would now estimate in 2001 Rands that four MPHs will cost about R1,45 billion.

491. As a taxpayer and citizen, I certainly do not begrudge the SA Navy "their"helicopters. I just want to emphasise the implications of what I consider to be poor acquisitions practices.

492. The DoD also sacrificed ten of the Light Utility Helicopters in order to facilitate the other price increases of the packages.

493. It is well known that one of the most pressing needs of the SANDF is the replacement of its combat air transport capability. In fact the original force design called for 60 light utility helicopters, while the revised force design called for 40. However, this was finally decreased to 30.

494. During the SCOPA hearings on 11th October 2000, certain SCOPA members had misgivings about the increase in the price of the packages, not only due to escalation, but in real terms. Mr Lalu Chiba questioned Mr Shaikh on the reasons behind the increase of R1,2 billion in real costs.

495. Firstly, Mr Shaikh tried to convince SCOPA that the reasons behind the increases were due to programme management costs. This was plainly not the case.

496. Although Mr Chiba tried his best to extract the truth about the real reasons for the cost increase, this issue was not satisfactorily addressed, especially concerning the cost increase of the Corvette and, in particular, concerning the Corvette Combat Suite.

Summary of Complaints

497. IMS

We were originally nominated in 1997 in terms of the tender baseline, as a South African supplier, for the IMS. Later, in 1999, we were selected in terms of the Request for Best and Final Offer. When we thought that the IMS was being deselected, we formally approached the JPT, acting on behalf of the State (meeting of 17th June 1999); they told us that "*we would be advised in due course*". Later, at the suppliers' meeting in 21st July 1999, DoD told us to contact GFC; at the same meeting GFC instructed ADS to advise us, they responded that they would do so within "one week". This did not happen, but after our enquiry by lawyer's letter, ADS advised us on 23rd August 1999 that we had not been finally selected and that it was a decision of the State. Nothing was heard from the DoD or ADS again, despite numerous letters to CAcq, until the Director of Naval Acquisition (DNA) advised us by letter on 6th October 2000 that we had been deselected due to cost ceilings on the Corvette programme. On 11th October DoD advised SCOPA during hearings that we were not finally selected due to refusing to provided a performance guarantee and that they had made the final decision on 24th August 1999. It is incongruous for the State to have made the decision on the 24th August 1999 while ADS advised us on the previous day that we had been deselected by the State. I have proved that there was no such cost ceiling applied to the Corvette Combat Suite; onthe contrary, the cost of the Corvette Combat Suite increased in real terms by some R798 million and the Corvette as a whole by R872 million and the Strategic Defence Packages by R1,5 billion. I have also proved that not only were we never asked for a performance guarantee, by that we offered to provide one without being request to do so, as well as formally made a practical risk abatement proposal. Neither of these were

Conclusions

498. In conclusion, I wish to state the following :

499. Regarding the System Management System (SMS), the price offered by C²I² Systems was misrepresented to justify awarding this contract to ADS, when clearly C²I² Systems's price was lower than that of ADS; with the JPT recording that both offered products were technically compliant.

500. Regarding the IPMS Simulator, C²I² Systems was clearly and unambiguously selected by the PCB to supply this element and this was communicated to the GFC by Armscor on behalf of the DoD. However, the GFC have with or without Armscor's permission deselected C²I² Systems's IPMS Simulator for reasons they refuse to explain. It would appear that C²I² Systems is being penalised for crying foul on other parts of the Corvette contract.

501. With respect to the Information Management System (IMS), C²I² Systems was involved in the development of the IMS for the SAN for 7 years and was **nominated** in terms of the formal tender documents (i.e. *Request for Information* and *Request for Offer*) as the supplier of this sub-system for the Corvettes Combat Suite. Later, this nomination evolved into **selection** in terms of the *Request for Best and Final Offer*. Thus a legitimate expectation that C²I² Systems would be selected as the supplier was created by our previous involvement in the project as well as the tender documentation of Armscor and DoD and events relating to the process of acquiring the Corvettes.

502. It was specified by Armscor and SAN that the South African industry should be the suppliers of the sub-systems of the Combat Suite and that a South African company should be the Combat Suite contractor, responsible for the integration of the Combat Suite sub-systems.

503. The end result, however, was that C²I² Systems was manoeuvred out of the contract, by the French-controlled company ADS, which also became the Combat Suite main contractor.

504. There were no lawful reasons for not awarding the IMS contract to C²I² Systems.

505. A clear conflict of interest arose namely :

- The fact that ADS, the nominated and eventually selected main contractor, could compete with other bidders for the sub-system contracts.

- The fact that ADS obtained C²I² Systems's price and technical specifications and directly or indirectly, disclosed these to what later became C²I² Systems's competitor (Detexis).

- The fact that Detexis and ADS are both in the Thomson-CSF group and form part of the prime contractor, i.e. the European South African Corvette Consortium (ESACC).

- The fact that Mr Shamin (Chippy) Shaikh played a role in the process regarding the selection of the contractors for the Combat Suite, is improper considering that his brother Schabir Shaikh has a direct interest, as director and shareholder in both ADS and Thomson-CSF (Southern Africa).

506. In the bigger picture, Thomson-CSF, through an irregular acquisition process, obtained a major share of the Corvette supply contract, contrary to what was envisaged by Armscor and the SA Navy.

507. Whoever made the decision in deselecting the IMS and selecting the Detexis, disregarded the report of the evaluation team. This report expressed a clear preference for C²I² Systems's IMS and indicated that the Detexis CSDB was technically unacceptable.

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