

Review of the **D154**
Project Sponsor Organisation



October 1994

Report by:

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**REVIEW OF THE
D154
PROJECT SPONSOR ORGANISATION**

20th October 1994

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EXECUTIVE SUMMARY

- 1. Set out below are the main conclusions and key recommendations of a Review undertaken to identify whether the Project Sponsor Organisation established is the most appropriate for the current stage of Project D154 and what changes may be required in future.
- 2. The review has revealed that an effective Sponsor organisation containing specialist components from MOD and Industry in balance, co-located on the site of operations at Devonport should produce operational benefits.
- 3. Having assembled the organisation and placed a contract for professional services and support to a pre-conceived plan, the game plan has varied significantly but the flexibility built into the organisation has enabled it to withstand the pressures imposed upon it without damage to the personal relationships established.
- 4. To prepare the Organisation for the long period of equally dynamic operational activity to follow this stage, the structure established does need some adjustment and equally importantly needs to recognise the need for greater adjustment to follow.
- 5. The following key recommendations identify the actions required to make these adjustments.

KEY RECOMMENDATIONS

- 6. That the **Organisational Structure** proposed for Stage 1 and the planned structures for the following stages be adopted as the future staffing strategy for the PS organisation. (See figures 8 to 11)
- 7. -That the **Stakeholder Management** proposals with the associated recording of communications, be implemented as soon as possible and procedures put in place to define the requirements of the interface officers within the PS Team and the co-ordinating role of the principal planning officer (See figures 2 and 12).
- 8. That a positive mechanism be defined to translate the results of **risk analysis** and the recommended advice from the NWA on risks which reside with MOD, into positive management action recognising any delegation limits that exist and the training of individuals that may be required.
- 9. That the relationship with and **tasking of the NWA team** by the PS team be reviewed to more closely reflect the defined NWA team areas of responsibility and from that, review the most appropriate means of tasking and monitoring their work.

- 10. That the areas of clerical/administrative, IT and Secretarial support to the PS team be brought up to full strength as a matter of urgency and made more effective by more positive management to support the operational needs of the specialist staff. A key role to be introduced is that of movement co-ordinator/receptionist for the key officers so that the organisation can be more productive by knowledge of current locations and future movements of their colleagues.
- 11. That performance indicators be developed for all staff in the PS organisation, and used as for a basis for performance assessment and comparison, drawing on some of the role analysis contained in this report as a starting point.
- 12. In recognition of the volatile and dynamic nature of the D154 Project as it evolves over the next 5 years, further reviews of the PS organisation and its operation be conducted at critical stages by an external team, the interval between not to exceed 12 months.

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2. Objectives of the Review

- 2.1. The key objectives of the review are as follows
- To identify whether the Project Sponsor's (PS) Organisational structure is the most appropriate for the current project situation.
 - To consider what changes to the D154 PS's Organisational structure may be necessary during the remaining Stages of the project.
- 2.2. The review also comments on previous reports (see Section 5).

Notes

1. Throughout this report the following definitions are adopted

Project Sponsor Organisation

- The total team, including all Project Sponsor, Finance and Secretariat, Contracts and Nuclear Works Advisor (NWA) staff.

Project Sponsor Team

- Staff working directly for the Project Sponsor, including Finance and Secretariat and Contracts but excluding NWA staff.

2. The review methodology and assumptions are stated at Annex A.

3. Previous Reports

- 3.1. The following are key reports considered during the review. A comprehensive list of other references is presented at Annex B -

<u>Report</u>	<u>Produced By</u>	<u>Date</u>
D154 Project Organisation	Director of Works (Strategic Systems)	Nov 93
NWA Tender Assessment/Selection Report	D154 Project Team	Jan 94
D154 Project Organisation Update	Assistant Director Ships / Works Devonport (ADS/WD)	Mar 94
Management of the Trident Works Programme	National Audit Office	Jul 94

4. Organisational Information

D154 Project Background

- 4.1. In July 1991 MOD concluded that all planned refit work on nuclear submarines, including Trident, could be accommodated at one dockyard.

- 4.2. At that time however MOD had 3 options
- Devonport upgrade.
 - Rosyth upgrade.
 - Rosyth new development project.
- 4.3. Following careful scrutiny by MoD of the proposals submitted for each option, the Secretary of State announced on the 24 June 1993 that DML's proposal for a Devonport upgrade represented the preferred solution in terms of value for money. Following the announcement MOD embarked on a 3 month period of consultation which culminated on the 29 September 1993 with confirmation that the facility for the refitting, refuelling, defuelling and decommissioning activities for Vanguard class submarines and other nuclear powered submarines, would be undertaken at Devonport, subject to satisfactory contractual conditions being agreed.
- 4.4. The D154 project represents the Devonport upgrade now being progressed by DML. The Project Sponsor's (PS) Organisation, to represent MOD's interests on this project (see Annex C) , has been put in place progressively at Devonport and is the subject of this review.

Present and Future Project Tasks

- 4.5. The main task of the Project Sponsor Organisation is to implement and control the D154 Project together with the following
- D151 Nuclear Utilities Building (NUB) Store Upgrade
 - D155A Container Transfer System; Reactor Access House Modifications
 - D155B Container Transfer System; Breakfall Towers
 - D58/2 Upgrade of Shore Sewerage System
- 4.6. In addition the Organisation is responsible for any other project work that arises before the dockyard privatisation in 1996. Responsibility for Works thereafter will fall to the new owner / operator under the planned Contractor-owned / Contractor-operated (COCO) regime. At the present time there are no further projects planned in this interim period, and resource requirements will be assessed on this basis.
- 4.7. Some of the PS Organisation carry out tasks derived from involvement in other work outside the project workload identified. Notably these are
- Contracts staff who as a second priority have responsibility for some residual contracts involving Trident Works at Faslane and Coulport, requiring peaks of activity as actions to achieve contract finalisation become necessary. Resources for servicing these contracts are based in Bath and line managed by the Grade 6 and SEO at Devonport.
 - Financial and Secretarial staff who provide support for the minor works, plant and machinery demands of the Property Management function. In exchange however the SS(D) organisation provides administrative support with filing, typing etc. and limited IT support from its resources.

4.8. The relationships of the key parties are shown in Figure 1. The stages of D154 and the corresponding primary tasks of the PS Organisation, following the definition of the Authority's requirement are to:-

- Stage 1 Negotiate a satisfactory Prime Contract for the project with DML. To be completed with contract agreed by January 1995.
- Stage 2 Oversee the Prime Contractor's Design Review. To be completed by April 1996.
- Stage 3 Audit the Prime Contractor's quality control of the Construction Works. To be completed by July 1998.
- Stage 4 Oversee acceptance and determine the functional adequacy of the Works on completion. To be completed by July 1999.

Analysis of Resources Required and Available

- 4.9. From an analysis of the information supplied during interviews with staff in the PS Organisation and a breakdown of the tasks associated with each role, a summary of the resources required to perform the roles at each project stage is shown in Table 1.
- 4.10. The resources currently available in the PS Organisation are shown in Table 2, assuming all present staff remain throughout D154, but allowing for known planned departures (see Annex D for details).
- 4.11. Table 3 compares the resources required with those available within the PS Team. Examination shows that the NWA is providing sufficient resources to discharge the role and will continue to do so under the terms of his contract. It can be seen however that there is a deficit of two staff currently, these being specifically 2xHPTO's within the Future Facilities Section. Longer term there is a gradual decline in the number of staff required, (See Annex D for details).
- 4.12. The functional groupings of the current organisation are suited to the present phase and provide a reasonable basis upon which to project the future requirement. These groupings are:-
- Project Sponsor.
 - Project Contract Manager / Future Facilities (PCWFF).
 - Assistant Director Contracts (Fleet Support) Trident (ADC(FS)T).
 - Finance and Secretariat (F&S).
 - Project Planning Officer (PPO).
 - Project Contract Manager/Major Works (PCMMW).
- Table 4 identifies from Table 1 the MoD resources required, by grade, in these sections of the PS Team.
- 4.13. The resources required to service the Stakeholder Management function are initially likely to be significant (see Figure 2 showing the Principal Stakeholders and their interface officers and Figure 12).



MINISTRY OF DEFENCE INTERESTS

SAFETY ADVISOR

BUDGET HOLDER "STAKEHOLDERS"

- CSC(S/WP)
- DNP
- DOR(Sea)
- DN(Plans)
- FOSM
- ADS/PP
- NBSM
- DSM
- DCS/SM
- DFSS(SS)
- DFS/SM
- DST(W)
- CINO
- CBS
- C/NTSP
- DFS(S)RP
- DFS(S)C
- DFS/FD

NUCLEAR WORKS ADVISOR

AREA BEING REVIEWED

PROJECT SPONSOR

CONTRACT

DELEGATIONS

PRIME CONTRACTOR DML

PRINCIPAL CONSULTANTS

- AEA
- ECH
- GIBB
- BNFL
- SSH
- RRA

MAIN CONTRACTORS

SUBCONTRACTORS & SUPPLIERS

Total Resources Required In The Project Sponsor Organisation.

Role \ Stage	Stage 1			Stage 2			Stage 3			Stage 4		
	Total	NWA	Non NWA	Total	NWA	Non NWA	Total	NWA	Non NWA	Total	NWA	Non NWA
Control Change	1.5	0.5	1	2.7	0.5	2.2	1.6	0.3	1.3	0.6	0.2	0.4
Manage Risks	2.5	1	1.5	2.1	1	1.1	1.4	1	0.4	1.3	1	0.3
Monitor Refit Planning	0.7	0.2	0.5	0.7	0.2	0.5	0.7	0.2	0.5	0.4	0.2	0.2
Enquiries/Admin Support	2.5	0	2.5	2.5	0	2.5	2.4	0	2.4	1.4	0	1.4
Negotiate PC	6	1.5	4.5	0	0	0	0	0	0	0	0	0
Contract Variations/Claims	1.5	0.5	1	3	1	2	2	1	1	2	1	1
Monitor Progress	0	0	0	2.1	1.1	1	1.6	1	0.6	1.2	1	0.2
Certify Payments	0	0	0	1.7	0.5	1.2	1.7	0.5	1.2	1.7	0.5	1.2
Budgets Outturn	2.5	0	2.5	2	0	2	2	0	2	1	0	1
Monitor Safety Case / Licence	1.3	1	0.3	1.3	1	0.3	1.3	1	0.3	1.3	1	0.3
Monitor Health & Safety	0.6	0.4	0.2	1	0.9	0.1	1.2	1	0.2	1.2	1	0.2
Monitor ARM	1.7	0.2	1.5	0.4	0.2	0.2	0.3	0.2	0.1	0.3	0.2	0.1
Oversee Design	8.2	4.1	4.1	6.5	5	1.5	0.3	0.2	0.1	0.3	0.2	0.1
Oversee Construction	0	0	0	0	0	0	4.8	3.8	1	0	0	0
Oversee User Training	0	0	0	0	0	0	0.7	0.5	0.2	0.7	0.5	0.2
Oversee Commissioning	0	0	0	0	0	0	1.7	1.5	0.2	2.0	1.3	0.7
Oversee Acceptance	0	0	0	0	0	0	0.3	0.2	0.1	0.9	0.4	0.5
Statutory Responsibilities	0.3	0.1	0.2	0.3	0.1	0.2	0.3	0.1	0.2	0.2	0.1	0.1
Audit Quality Control	0.7	0.5	0.2	0.7	0.5	0.2	0.7	0.5	0.2	0.5	0.4	0.1
Non-D154 Sponsorship	6	2	4	4	1	3	0	0	0	0	0	0
Organisational Management	2	1	1	2	1	1	2	1	1	2	1	1
Totals	38	13	25	33	14	19	27	14	13	19	10	9

Notes:

1. Negotiate PC item allows for extensive liaison with Stakeholders in assessing the submitted tender against the Authority's Requirements.
2. Organisational Management item excludes Grade 5 SSD.

Resources Comparison In The Project Sponsor Organisation.

Role	Stage 1			Stage 2			Stage 3			Stage 4		
	Required	Available	Diff.	Required	Available	Diff.	Required	Available	Diff.	Required	Available	Diff.
Control Change	1.5	2.3	-0.8	2.7	2.3	0.4	1.6	2.1	-0.5	0.6	2	-1.4
Manage Risks	2.5	3	-0.5	2.1	3	-0.9	1.4	3	-1.6	1.3	3	-1.7
Monitor Refit Planning	0.7	0.7	0	0.7	0.7	0	0.7	0.7	0	0.4	0.7	-0.3
Enquiries/Admin Support	2.5	2.5	0	2.5	2.5	0	2.4	2.5	-0.1	1.4	2.5	-1.1
Negotiate PC	6	5.5	0.5	0	0	0	0	0	0	0	0	0
Contract Variations/Claims	1.5	2	-0.5	3	6.5	-3.5	2	6.5	-4.5	2	6.5	-4.5
Monitor Progress	0	0	0	2.1	1.1	1	1.6	1	0.6	1.2	1	0.2
Certify Payments	0	0	0	1.7	0.5	1.2	1.7	0.5	1.2	1.7	0.5	1.2
Budgets Outturn	2.5	2.5	0	2	2.5	-0.5	2	2.5	-0.5	1	2.5	-1.5
Monitor Safety Case / Licence	1.3	1	0.3	1.3	1	0.3	1.3	1	0.3	1.3	1	0.3
Monitor Health & Safety	0.6	0.6	0	1	1.1	-0.1	1.2	1.2	0	1.2	1.2	0
Monitor ARM	1.7	1.7	0	0.4	1.7	-1.3	0.3	1.7	-1.4	0.3	1.7	-1.4
Oversee Design	8.2	5.1	3.1	6.5	6	-0.5	0.3	1.2	-0.9	0.3	1.2	-0.9
Oversee Construction	0	0	0	0	0	0	4.8	3.8	1	0	0	0
Oversee User Training	0	0	0	0	0	0	0.7	0.5	0.2	0.7	0.5	0.2
Oversee Commissioning	0	0	0	0	0	0	1.7	1.5	0.2	2	1.3	0.7
Oversee Acceptance	0	0	0	0	0	0	0.3	0.2	0.1	0.9	0.4	0.5
Statutory Responsibilities	0.3	0.1	0.2	0.3	0.1	0.2	0.3	0.1	0.2	0.2	0.1	0.1
Audit Quality Control	0.7	1	-0.3	0.7	1	-0.3	0.7	1	-0.3	0.5	0.9	-0.4
Non-D154 Sponsorship	6	6	0	4	4	0	0	0	0	0	0	0
Organisational Management	2	2	0	2	2	0	2	2	0	2	2	0
Totals	38	36	2	33	36	-3	27	33	-6	19	29	-10

Notes:

1. Comparison = Total Required (Table 1) - Total Available (Table 2)

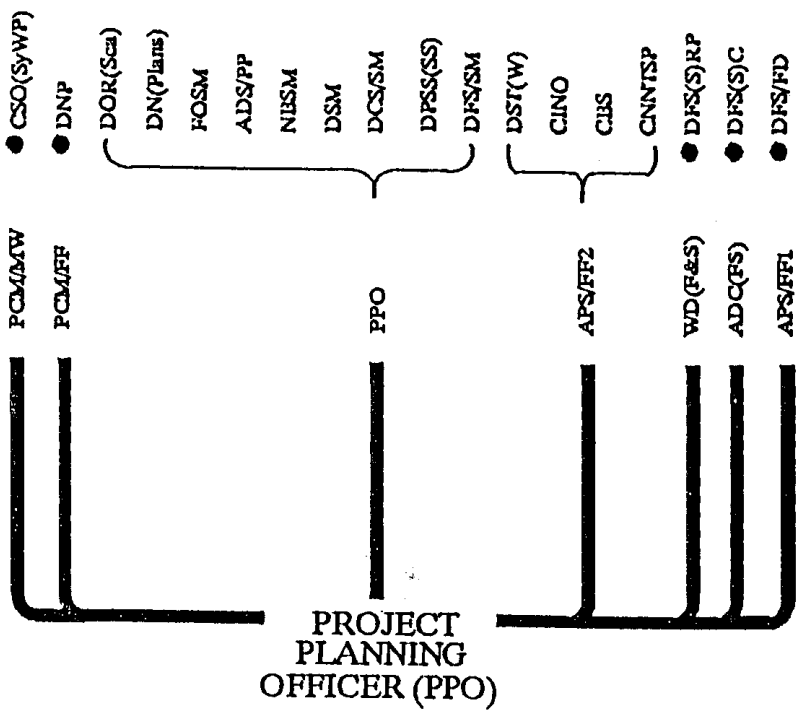
Table 4

Total MOD Resources Required In The Project Sponsor Team.

Project Stage Sponsor Team	Stage 1						Stage 2						Stage 3						Stage 4												
	6	7	S	H	E	A/S	TOTAL	6	7	S	H	E	A/S	TOTAL	6	7	S	H	E	A/S	TOTAL	6	7	S	H	E	A/S	TOTAL			
Project Sponsor	1	-	-	-	-	-	1	1	-	-	-	-	-	1	1	-	-	-	-	-	1	1	-	-	-	-	-	1			
PCM/FF	-	1	2	4	1	-	8	-	1	2	4	-	-	7	-	1	1	2	-	-	4	-	1	1	1	-	-	3			
Contracts	1	-	1	2	2	-	6	* - (#) 1	1	-	-	-	2	* - (#) 1	-	-	-	-	1	* - (#) 1	-	-	-	-	-	1					
F&S	* *	-	1	-	1	1	2	5	* *	-	1	-	1	1	2	5	* *	-	1	-	2	1	2	6	-	-	1	-	1	1	3
PPO	-	1	-	-	-	-	1	-	1	-	-	-	-	1	-	1	-	-	-	-	1	-	1	-	-	-	-	1			
PCM/MW	-	1	-	3	-	-	4	-	1	-	2	-	-	3	-	-	-	-	-	-	0	-	-	-	-	-	-	0			
Totals	2	4	3	10	4	2	25	1	4	2	8	2	2	19	1	3	1	5	1	2	13	1	2	2	2	1	1	9			

- Note:
1. Resource indicates the median level through the relevant stage.
 2. '*' - Contracts must retain line responsibility through DFS(S)C with Grade 6/7 contacts available off-site.
 3. '#' - Visiting SEO.
 4. '*
*' - SEO currently in post and Grade 7 proposed for consideration

SUPPORT FROM
NUCLEAR
WORKS
ADVISOR



PROJECT
PLANNING
OFFICER (PPO)

PROJECT
SPONSOR

Principal
MOD
"Stakeholders"

Interface
Officer

Coordination

- 4.20. NWA(D) is responsible for all technical aspects including civil / structural, geotechnical / geological, seismological and maritime.
- 4.21. NWA(C) maintains line management responsibility for areas defined in para 4.17, and additionally planning / programming, quantity surveying and quality management.
- 4.22. NWA(N) is involved with the Safety Case / Licensing issues and leads the Nuclear Engineering group including reactor technology, mechanical and electrical, control and instrumentation, heating and ventilation, radiological protection, hazards, radwaste, cranes and commissioning.

Specific Roles and MoD Resources Required in the Project Sponsor Team

- 4.23. The PS heads the team controlling and coordinating MoD's functional and administrative needs and resolving any conflicts between their competing requirements. To achieve this on a large project, MoD staff carrying out key functions are most effective if collocated with the PS. These functions are those of Finance, Contracts and the key "User" areas of weaponry, berthing and docking utilities.
- 4.24. The other important functions this team requires are not part of MoD's natural armoury and can be more effectively provided from industry through the NWA.
- 4.25. The roles of the PS Organisation as applicable to all stages, highlighted to correspond with the resources in Table 1 are as follows:-
- **Control change** - control MoD's habitual desire to institute changes to the established requirement or influence unnecessarily the manner of its execution, primarily by Stakeholder Management.
 - **Identify and manage risks** not transferred to the Prime Contractor, and oversee those which are.
 - **Monitor refit planning** defined by MoD and impacting on D154.
 - **Deal with Parliamentary and Press Enquiries** and provide **Administrative support**.
 - **Negotiate the Prime Contract**.
 - **Administer the Prime Contract**, dealing with **contract variations and claims** and formally issue any instructions required.
 - **Monitor the progress** of the Prime Contractor achieved against the defined programme.
 - **Certify payments** claimed at milestones.
 - **Budget expenditure** and forecast **outturn**.
 - **Monitor the Nuclear Safety Case** and other conditions of the Nuclear Site Licence in terms of the Prime Contractor's progress.
 - **Monitor the Prime Contractor's discharge** of his and MoD's **Health and Safety** responsibilities arising from the project.

- Monitor the availability, reliability and maintainability (ARM) implications of design and construction activity.
- Oversee the Prime Contractor in order to verify that the Authority's Requirements have been met in all respects in the Works in terms of:-
 - Design.
 - Construction.
 - User-training.
 - Commissioning.
 - Acceptance.
- Ensure the satisfactory discharge of MoD's Statutory Responsibilities arising from the project.
- Oversee and Audit, as required, the Prime Contractor's Quality Control systems.
- Provide the Sponsorship function on non-D154 Projects.
- Provide overall and line management of the Project Organisation and a focal point for all key issues.

4.26. The principal Stakeholders identified in Figure 2 and Figure 12 can be divided functionally as:-

- Those defining the timing and extent of refits.
- Those who will be customers of the new facilities.
- Those with passive interest in the project, but potentially with influence to impact upon it.
- MoD Design and Technical Authorities whose changing requirements or standards pose a significant risk.

The distribution of the principal Stakeholders geographically and functionally, leads to the requirement for a management plan and a focal point to coordinate and be responsible for the role.

4.27. Table 4 defines the MoD resource required to fulfill the collective roles in para 4.25 appropriate to each Section.

4.28. Tables 5 - 8 and Figures 3 - 6 identify the roles required in the PS Team within individual Sections. Tables 9 and 10 cross reference these roles, and those of the NWA, to the associated areas of primary responsibilities.

Organisation

- 4.29. Current Structure Figure 7 shows the current structure and resource in place in the PS Organisation.
- 4.30. Current Structure Adjusted to Reflect Resources Required Figure 8 shows the proposed structure of the PS Organisation for Stage 1. There is little change compared with the current structure other than the staffing of the two vacant HPTO posts in the PCM/FF Section, considered to be necessary, and a more even split of HPTO resources, also within this Section.
- 4.31. Options for Revision of Structure by Stage Figures 9, 10, and 11 show how the PS Organisation is expected to develop during Stages 2, 3, and 4 respectively. These Figures take into account the recommendations in the report for resource levels and roles. (see Annex D for details).

Management Interface between MoD and the Prime Contractor

- 4.32. With the existing points of contact between MoD Directorates, DML and its sub-contractors having developed prior to this project, there will probably be difficulty encountered in setting up the management interfaces to operate in the way shown in Figures 1 and 2.
- 4.33. More significantly, the benefits to individuals within MoD or companies by operating outside the framework may be perceived to be so worthwhile that considerable effort will be expended to maintain these existing points of contact on technical, commercial or financial grounds. The management interface between MoD and the Prime Contractor must therefore be a strong one, so that continuing direct points of contact can be controlled so as to exclude matters which would compromise MoD. This requires:-
- A simple system to record the import of informal contacts/discussions between staff in MoD and the Prime Contractor, preferably set up by the latter.
 - Formal and effective reports on the management of MoD Stakeholders, from the interface officers to the PPO/PS reviewing the contents of the Prime Contractor records of contacts in order to identify and control potential changes and reduce risk.
 - Regular structured formal meetings between the PS Team, NWA and the Prime Contractor, to address areas of stakeholder interest for which there are agendas, reports, actions and minutes.
 - Reviews of performance achieved by the system in use.

Required Roles of the Project Sponsor Team During Stage 1.


Table 5

Role \ Stage	Project Sponsor	PCM/FF Section	ADC/FS(T) Section	F&S Section	PPO	PCM/MW Section
Control Change	3 ✓	8 ✓			47 ✓	51 ✓
Manage Risks	3 ✓	8 ✓			47 ✓	51 ✓
Monitor Refit Planning					47 ✓	
Enquiries	3 ✓			35 ✓	48 ✓	
Negotiate PC	✓	7 ✓	19 ✓			
Contract Variations/Claims			19 ✓	35 ✓		
Monitor Progress						
Certify Payments						
Budgets Outturn				35 ✓		
Monitor Safety Case / Licence		9 ✓				
Monitor Health & Safety		9 ✓				
Monitor ARM		9 ✓				
Review Tender Design		6 ✓				
Oversee Construction						
Oversee User Training						
Oversee Commissioning						
Oversee Acceptance						
Statutory Responsibilities	3 ✓			35 ✓		
Audit Quality Control		9 ✓				
Non-D154 Sponsorship						52 ✓
Team Management	1 ✓	11 ✓	20 ✓	35 ✓		✓

- Notes:
1. Notes refer to paragraph numbers in Annex D.
 2. Shaded areas not applicable at this Stage.

**Required Roles of the Project Sponsor Team
During Stage 2.**

Role \ Stage	Project Sponsor	PCM/FF Section	ADC/FS(T) Section	F&S Section	PPO	PCM/MW Section
Control Change	✓	✓			✓	✓
Manage Risks	✓	✓			✓	✓
Monitor Refit Planning					✓	
Enquiries	✓			✓	✓	
Negotiate PC						
Contract Variations/Claims		✓	✓	✓		
Monitor Progress		✓				
Certify Payments		✓	✓	✓		
Budgets Outturn				✓		
Monitor Safety Case / Licence		✓				
Monitor Health & Safety		✓				
Monitor ARM		✓				
Oversee Design		✓				
Oversee Construction						
Oversee User Training						
Oversee Commissioning						
Oversee Acceptance						
Statutory Responsibilities	✓			✓		
Audit Quality Control		✓				
Non-D154 Sponsorship						✓
Team Management	✓	✓	✓	✓		✓

Notes: 1.  Shaded areas not applicable at this Stage.

Required Roles of the Project Sponsor Team During Stage 3.

Role \ Stage	Project Sponsor	PCM/FF Section	ADC/FS(T) Section	F&S Section	PPO	PCM/MW Section
Control Change	✓	✓			✓	
Manage Risks	✓	✓			✓	
Monitor Refit Planning					✓	
Enquiries	✓			✓	✓	
Negotiate PC						
Contract Variations/Claims		✓	✓	✓		
Monitor Progress		✓				
Certify Payments		✓	✓	✓		
Budgets Outturn				✓		
Monitor Safety Case / Licence		✓				
Monitor Health & Safety						
Monitor ARM		✓				
Oversee Design						
Oversee Construction		✓				
Oversee User Training		✓				
Oversee Commissioning		✓				
Oversee Acceptance		✓				
Statutory Responsibilities	✓			✓		
Audit Quality Control		✓				
Non-D154 Sponsorship						
Team Management	✓	✓		✓		

Notes: 1. Shaded areas not applicable at this Stage.

Required Roles of the Project Sponsor Team During Stage 4.

Role \ Stage	Project Sponsor	PCM/FF Section	ADC/FS(T) Section	F&S Section	PFO	PCM/FF Section
Control Change	✓	✓			✓	
Manage Risks	✓	✓				
Monitor Refit Planning					✓	
Enquiries	✓			✓	✓	
Negotiate PC						
Contract Variations/Claims		✓	✓	✓		
Monitor Progress		✓				
Certify Payments		✓	✓	✓		
Budgets Outturn				✓		
Monitor Safety Case / Licence		✓				
Monitor Health & Safety		✓				
Monitor ARM		✓				
Oversee Design						
Oversee Construction						
Oversee User Training		✓				
Oversee Commissioning		✓				
Oversee Acceptance		✓				
Statutory Responsibilities	✓			✓		
Audit Quality Control		✓				
Non-B154 Sponsorship						
Team Management	✓	✓		✓		

Notes: 1. Shaded areas not applicable at this Stage.

Responsibilities of the Project Sponsor Team

Role \ Responsibility	A	B	C	D	E	F
Control Change	✓			✓		
Manage Risks				✓		
Monitor Refit Planning	✓					
Enquiries/Admin Support						✓
Negotiate PC			✓			
Contract Variations/Claims		✓	✓			
Monitor Progress					✓	
Certify Payments		✓	✓			
Budgets Outturn		✓				
Monitor Safety Case / Licence	✓					
Monitor Health & Safety	✓					
Monitor ARM	✓					
Oversee Design	✓					
Oversee Construction	✓					
Oversee User Training	✓					
Oversee Commissioning	✓					
Oversee Acceptance	✓					
Statutory Responsibilities						✓
Audit Quality Control					✓	
Non-D154 Sponsorship	✓		✓	✓	✓	✓
Organisational Management						

Notes:

Responsibilities:-

A - Stakeholder Management

B - Financial Matters

C - Contractual Matters

D - Risk Management

E - Reporting Duties

F - Secretariat/Statutory Duties

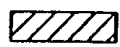
 - Not Applicable

Table 10

Responsibilities of the NWA

Role \ Responsibility	A	B	C	D	E	F
Control Change	✓	✓				
Manage Risks	✓	✓				
Monitor Refit Planning					✓	
Enquiries/Admin Support						
Negotiate PC				✓		
Contract Variations/Claims				✓		
Monitor Progress			✓			
Certify Payments				✓		
Budgets Output						
Monitor Safety Case / Licence		✓	✓			
Monitor Health & Safety			✓		✓	
Monitor ARM		✓	✓			
Oversee Design	✓	✓				
Oversee Construction	✓	✓				
Oversee User Training					✓	
Oversee Commissioning	✓	✓				
Oversee Acceptance	✓	✓				
Statutory Responsibilities					✓	
Audit Quality Control					✓	
Non-D154 Sponsorship	✓	✓	✓	✓	✓	/
Organisational Management						

Notes:

Responsibilities:-


A - Civil Engineering Support

B - Nuclear Engineering Support

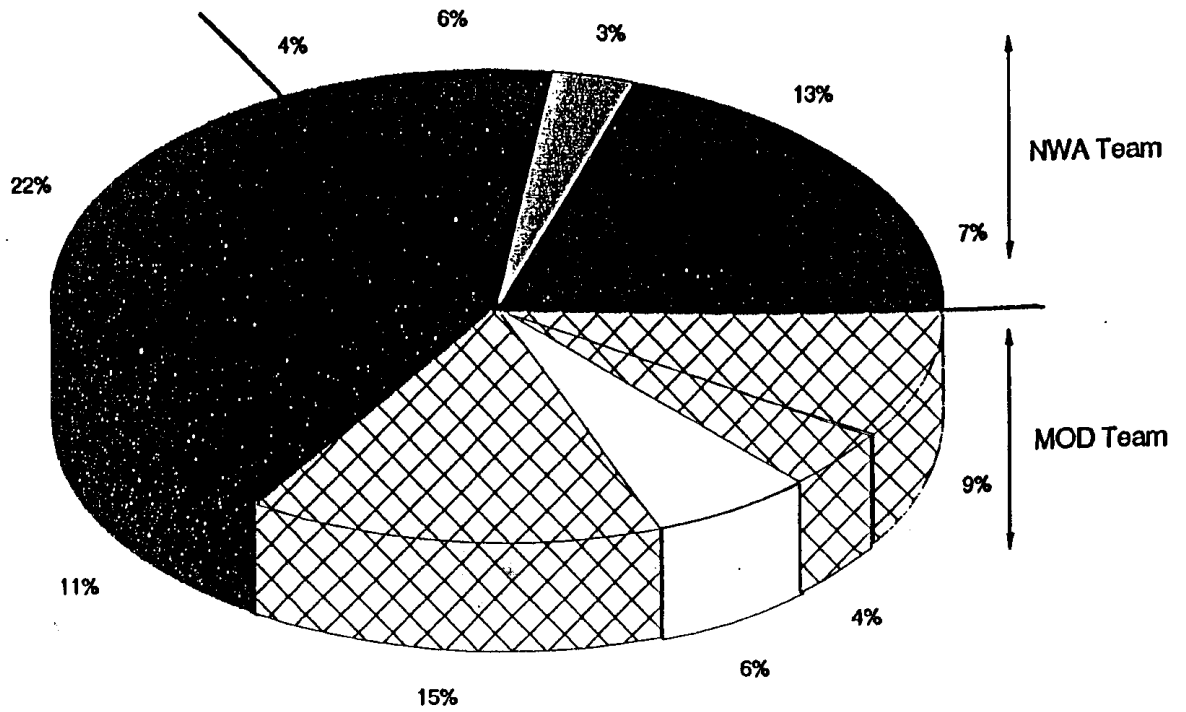
C - Oversight of PC Contract

D - Commercial Advice






E - Specialist Advice

 - Not Applicable






Project Sponsor Organisation Resource Activities - Stage 1



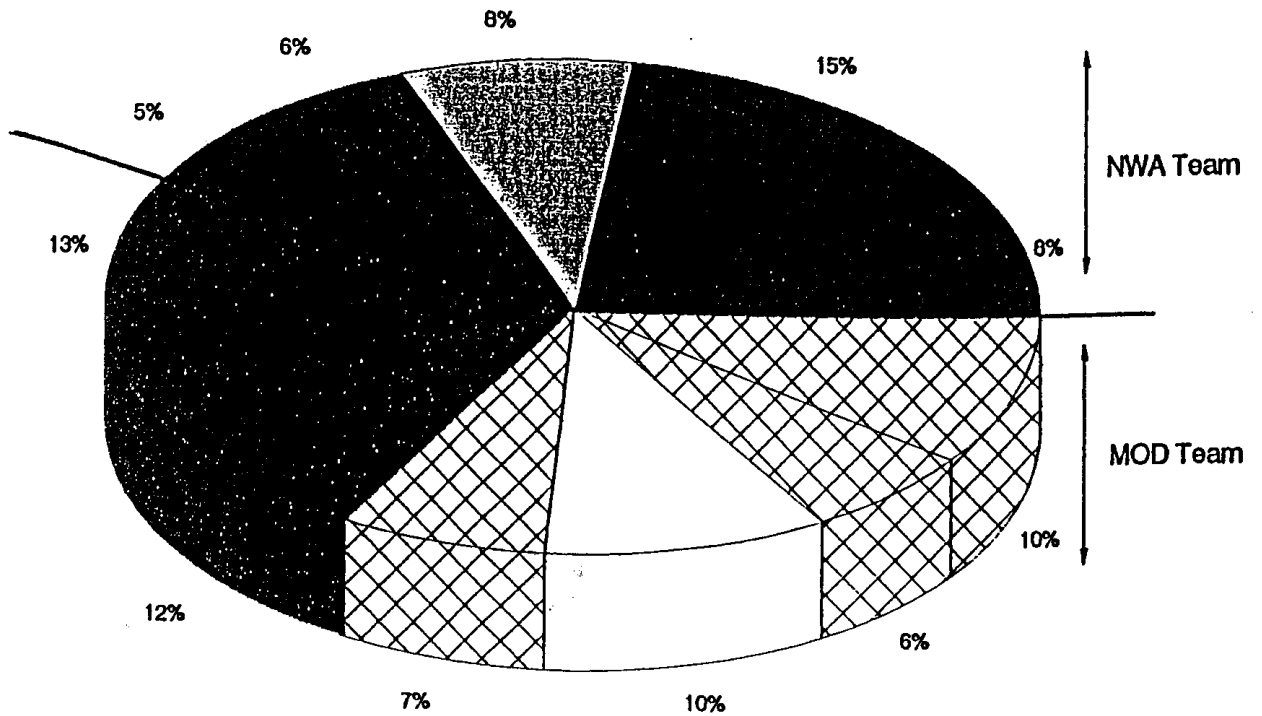
NWA Team Responsibilities

-  A Civil Engineering Support
-  B Nuclear Engineering Support
-  C Oversight Of Prime Contractor's Progress
-  D Commercial Advice
-  E Specialist Advise






MOD Team Responsibilities

-  F Stakeholder Management
-  G Financial Matters
-  H Contractual Matters
-  I Risk Management
-  J Reporting
-  K Secetarial/statutory Duties







Project Sponsor Organisation Resource Activities - Stage 2



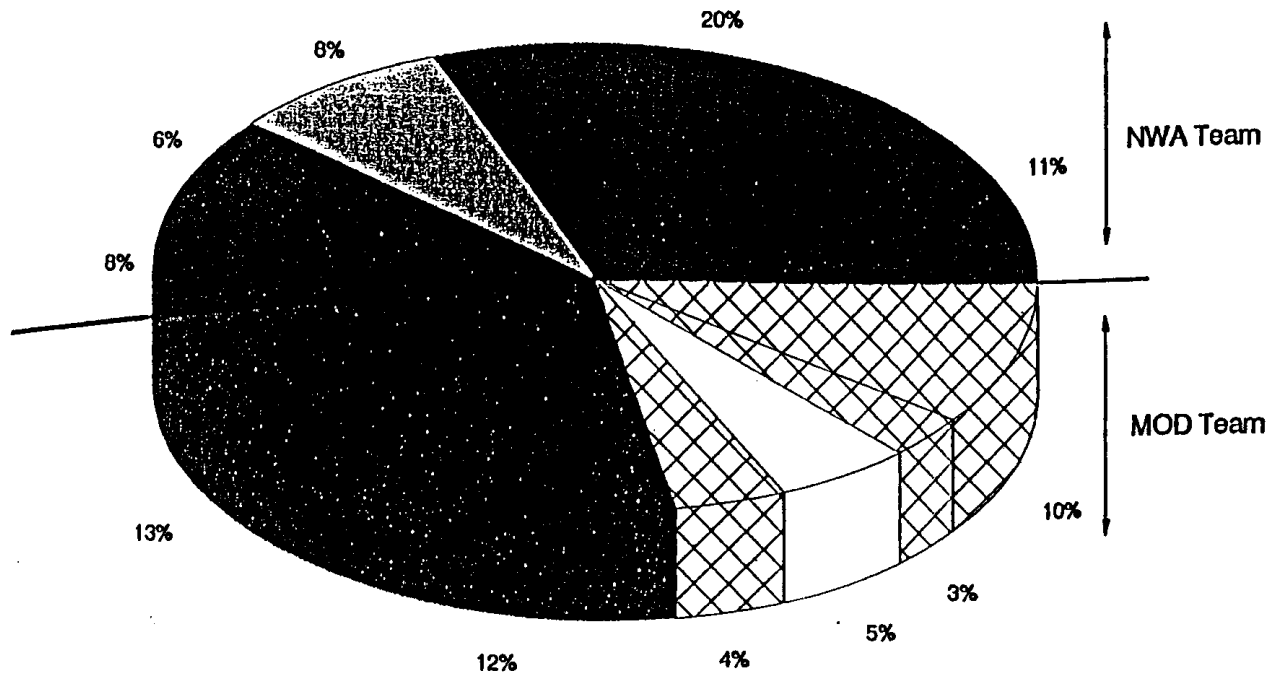
NWA Team Responsibilities

-  A Civil Engineering Support
-  B Nuclear Engineering Support
-  C Oversight Of Prime Contractor's Progress
-  D Commercial Advice
-  E Specialist Advice






MOD Team Responsibilities

-  F Stakeholder Management
-  G Financial Matters
-  H Contractual Matters
-  I Risk Management
-  J Reporting
-  K Secretarial/statutory Duties







Project Sponsor Organisation Resource Activities - Stage 3



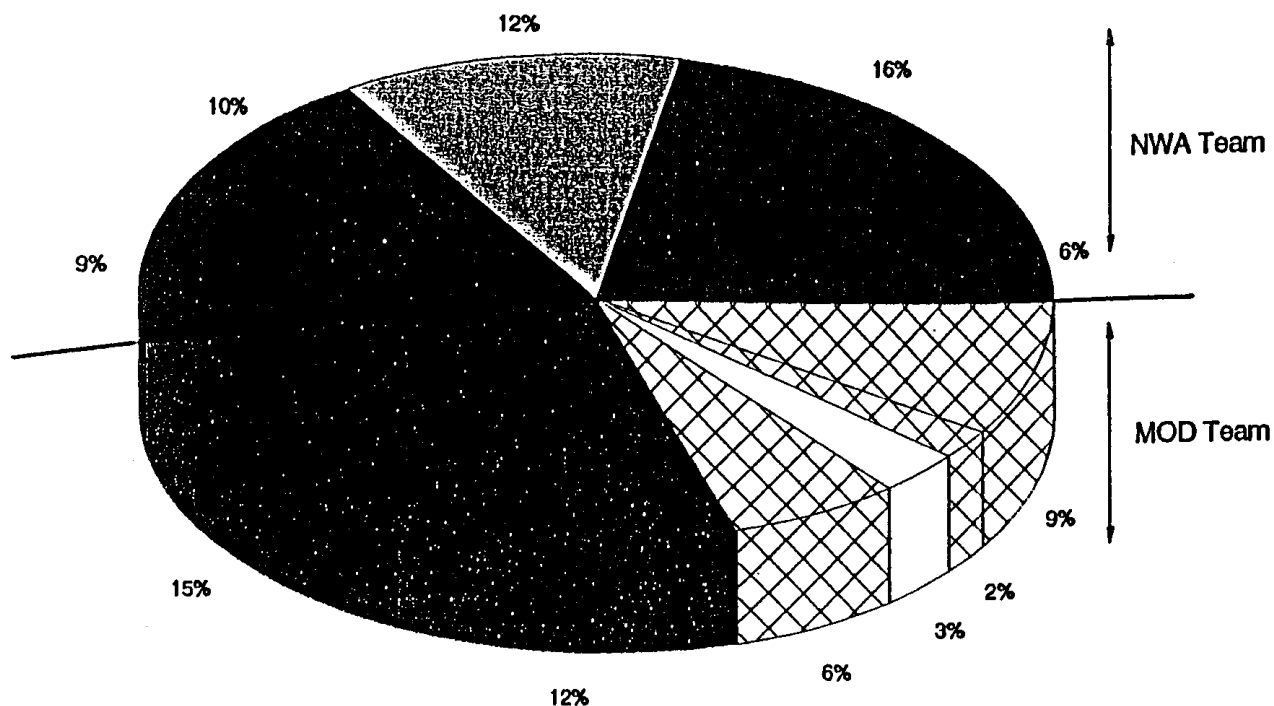
NWA Team Responsibilitites

-  A Civil Engineering Support
-  B Nuclear Engineering Support
-  C Oversight Of Prime Contractor's Progress
-  D Commercial Advice
-  E Specialist Advise

MOD Team Responsibilities

-  F Stakeholder Management
-  G Financial Matters
-  H Contractual Matters
-  I Risk Management
-  J Reporting
-  K Secetarial/statutory Duties

Project Sponsor Organisation Resource Activities - Stage 1



NWA Team Responsibilities

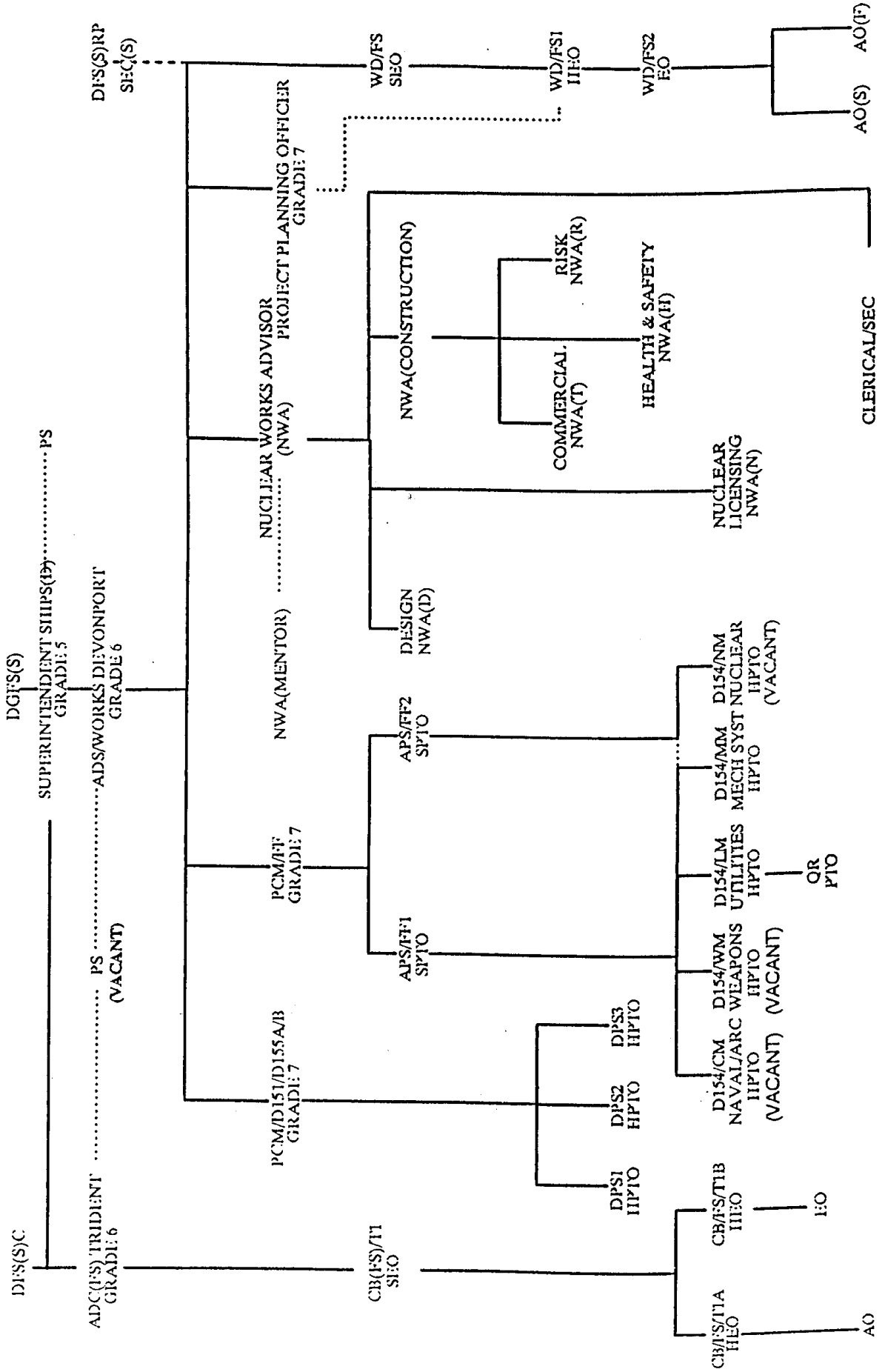
- A Civil Engineering Support
- B Nuclear Engineering Support
- C Oversight Of Prime Contractor's Progress
- D Commercial Advice
- E Specialist Advice

MOD Team Responsibilities

- F Stakeholder Management
- G Financial Matters
- H Contractual Matters
- I Risk Management
- J Reporting
- K Secretarial/Statutory

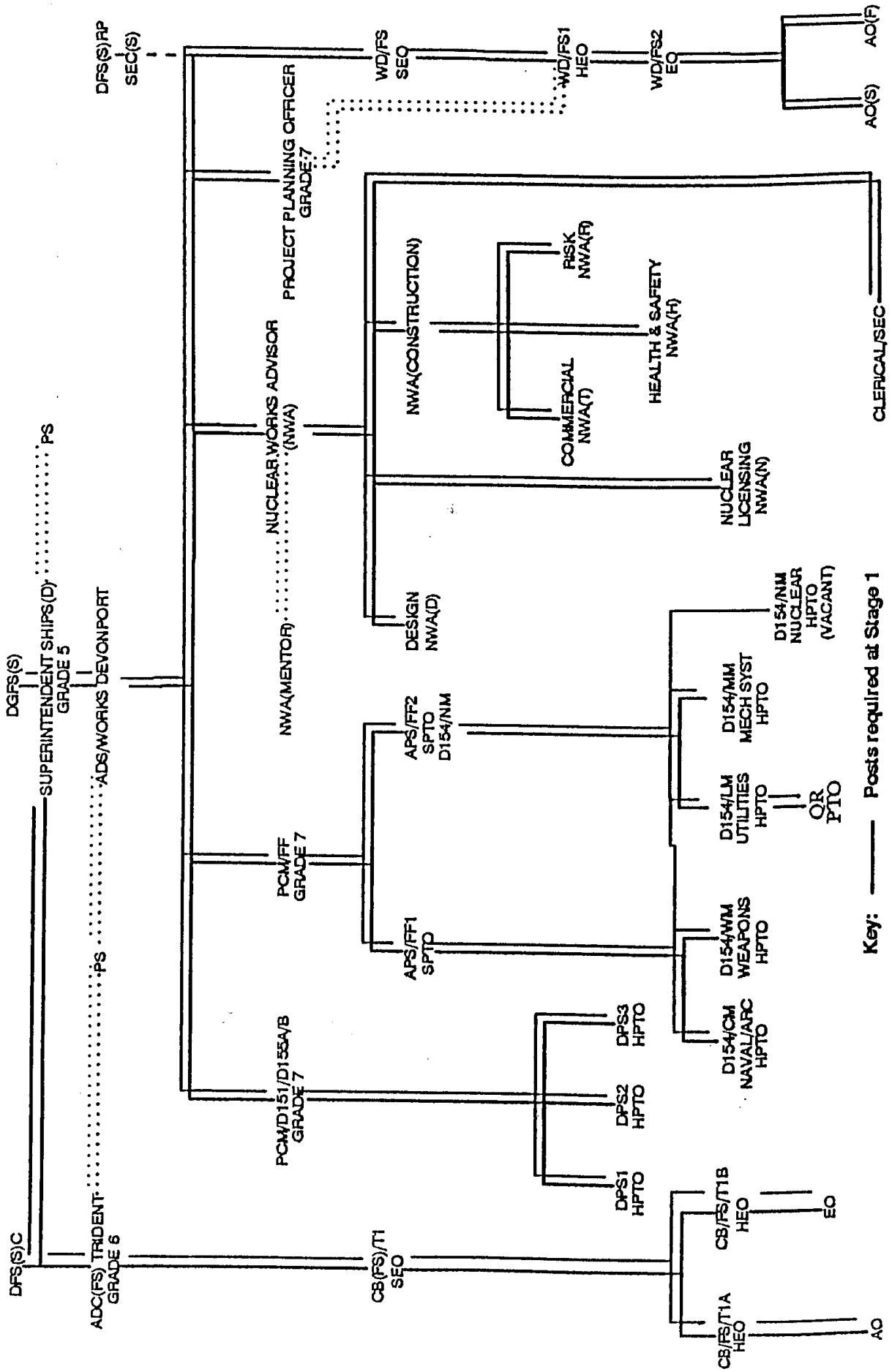
Figure 7

CURRENT STRUCTURE OF PROJECT SPONSOR ORGANISATION



PROPOSED STRUCTURE OF PROJECT SPONSOR ORGANISATION: STAGE 1

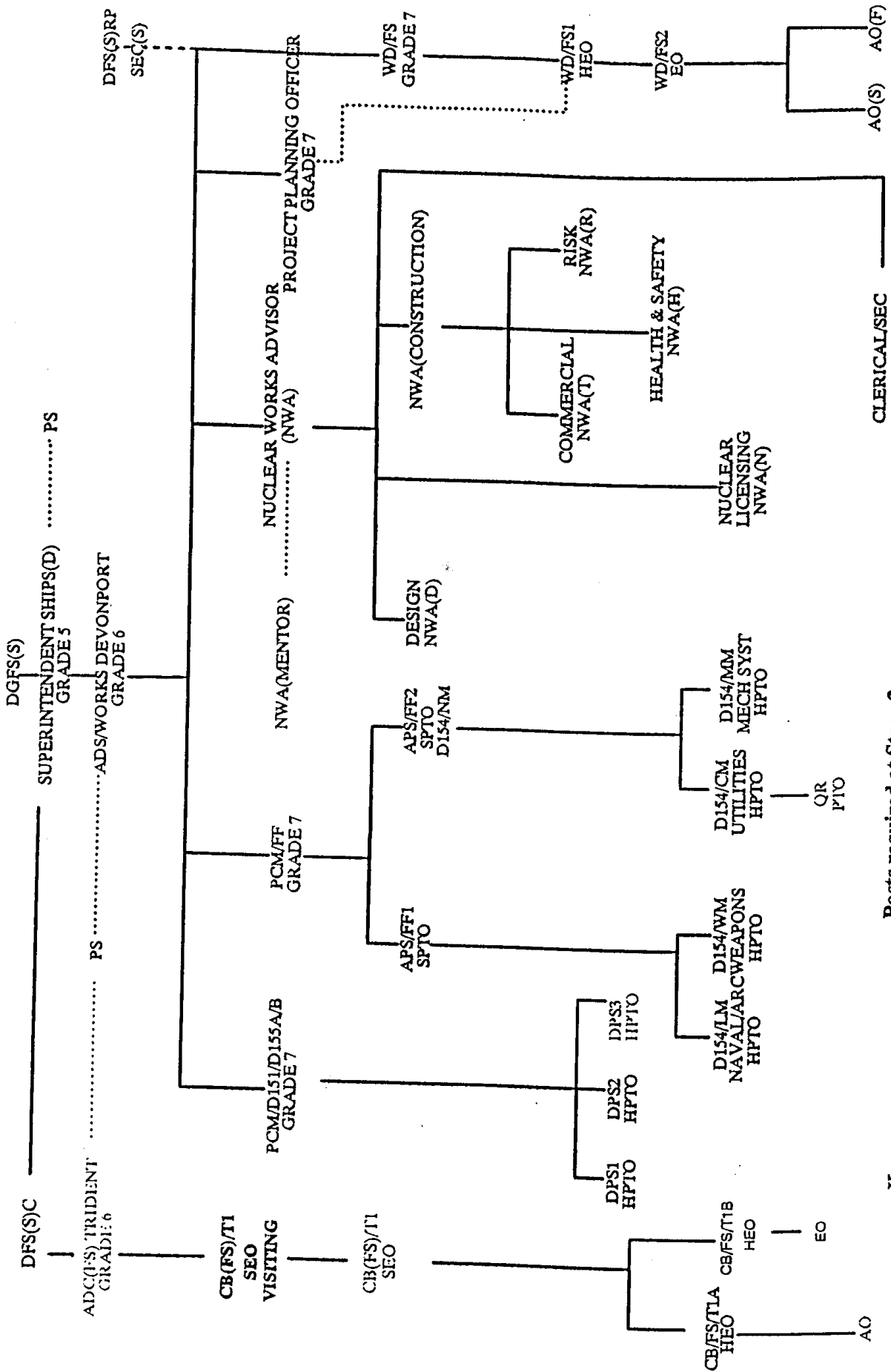
Figure 8



Key: — Posts required at Stage 1
 - - - Posts lost from current structure

Figure 9

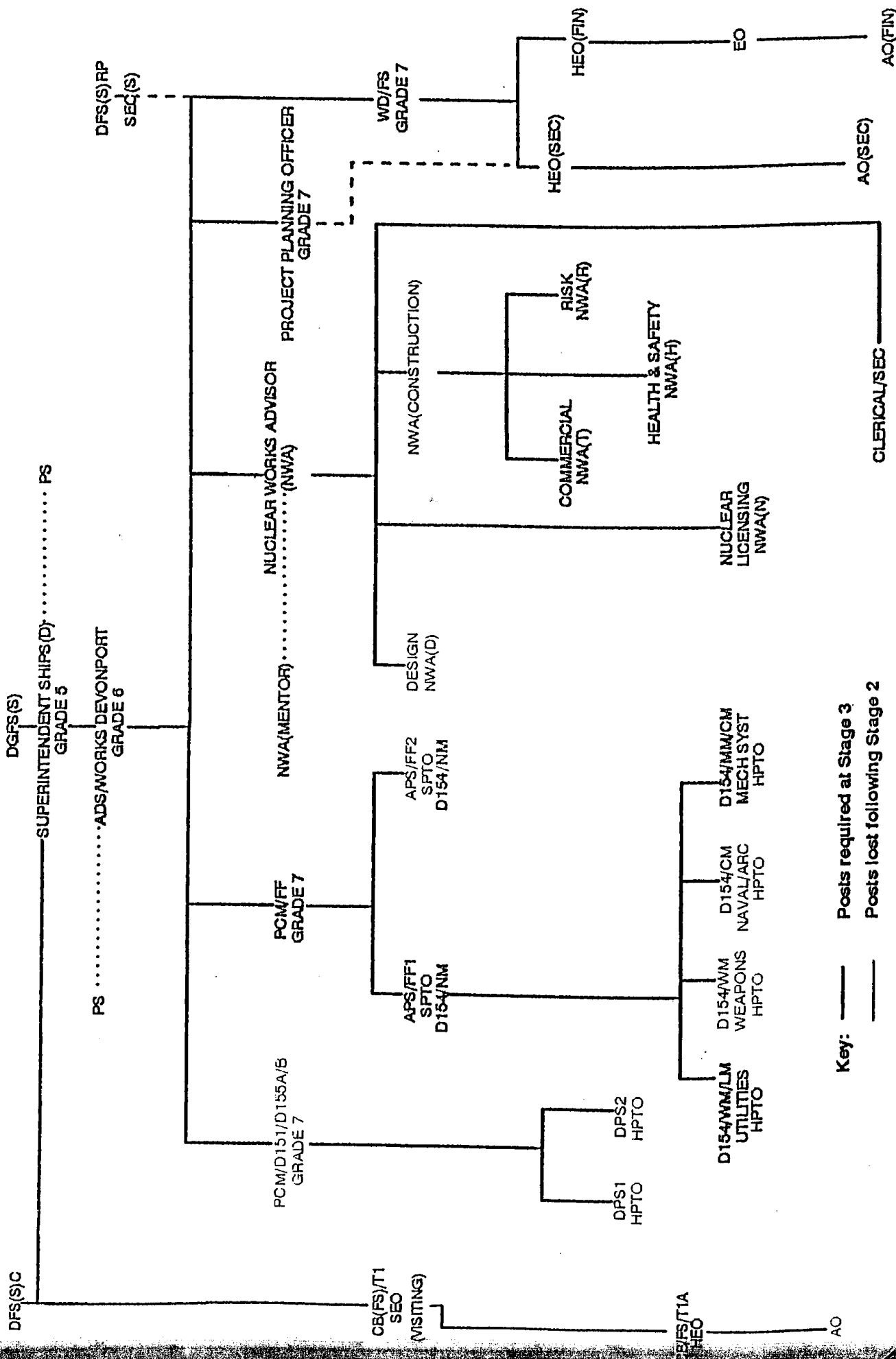
PROPOSED STRUCTURE OF PROJECT SPONSOR ORGANISATION: STAGE 2



Key: _____ Posts required at Stage 2
 _____ Posts lost following Stage 1

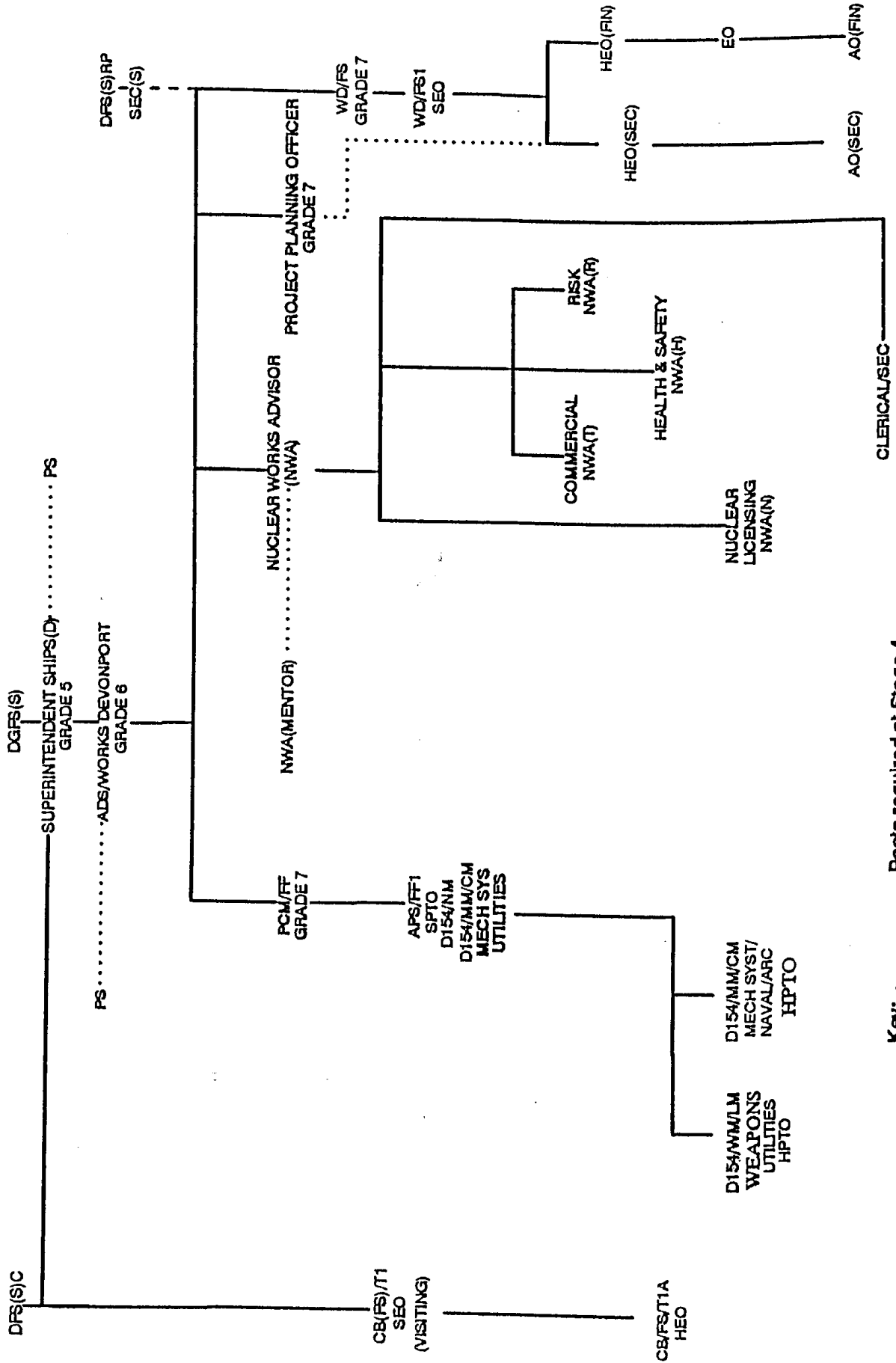
PROPOSED STRUCTURE OF PROJECT SPONSOR ORGANISATION: STAGE 3

Figure 10



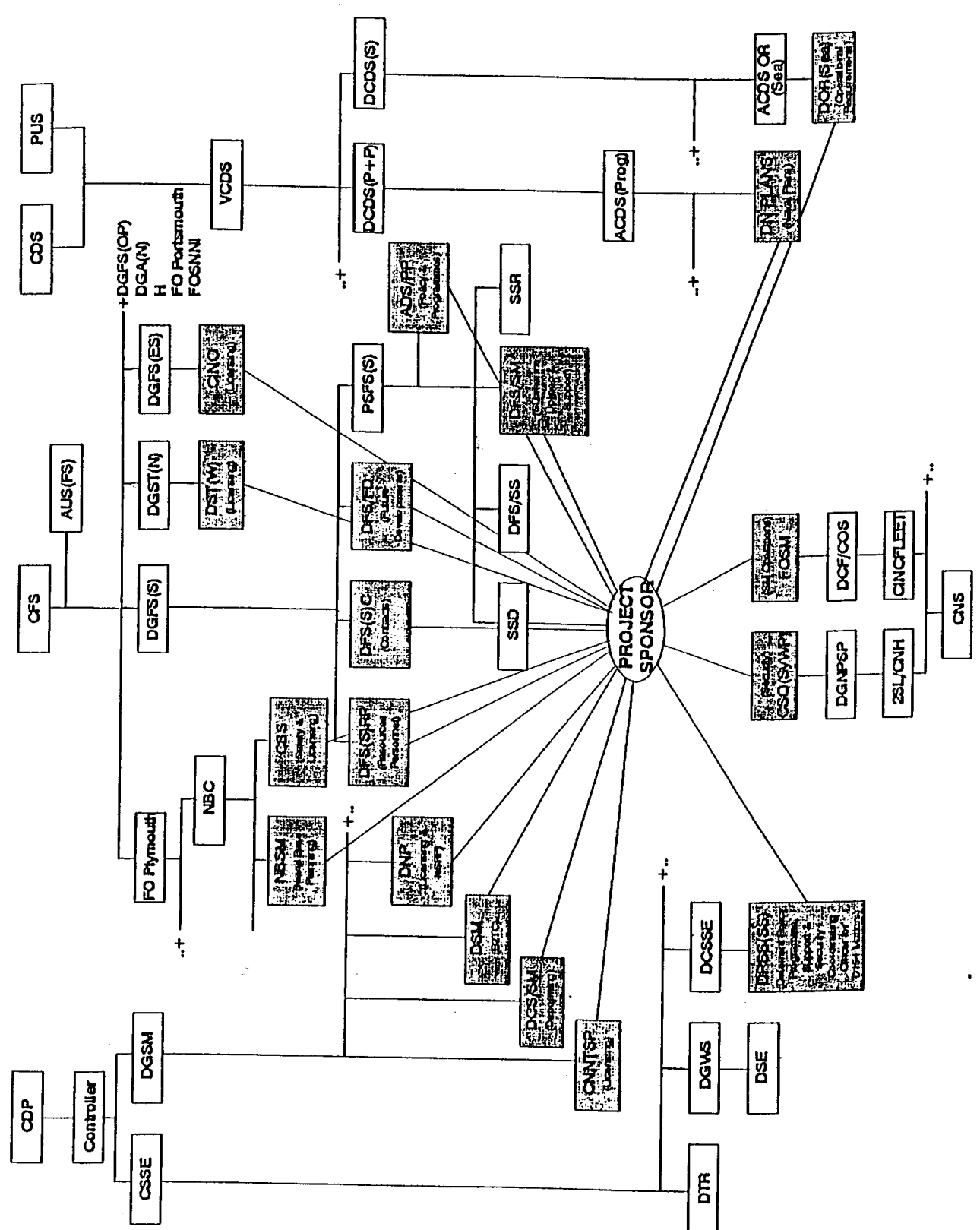
PROPOSED STRUCTURE OF PROJECT SPONSOR ORGANISATION: STAGE 4

Figure 11



Key: — Posts required at Stage 4
 - - - Posts lost following Stage 3

Figure 12



Principal Stakeholders

Risk Management

- 5.10. The risks on the project are intended to be shared between the Prime Contractor, who should have accepted the lion's share at the conclusion of tender negotiations, and MoD who retain those risks not capable of economic transfer to the Prime Contractor. The role of the PS Organisation is to deal with the total risk envelope by:-
- making sure that risks allocated are managed by those responsible and not migrated.
 - effectively managing those risks which reside with MoD.
 - avoiding the development of new risks.
 - plotting and monitoring the residual risk against the predictions made.
 - reporting the results and adjusting budgets accordingly.
- 5.11. The NWA has responsibility for risk assessment and analysis, giving guidance to the PS so that he can take effective management action for those risks that fall to MoD and considering how effectively the Prime Contractor is dealing with the risks that he has accepted. The risk management process must be proactively pursued and is the activity with the highest priority for the PS Organisation, requiring the most positive attention by the PS personally.
- 5.12. To achieve this level of risk management it is important that all members of the PS Organisation are sufficiently aware of the process of risk management to be able to contribute to the essential fact gathering and recognise the significance of contributing events and their effects.

The Basis for Milestone Payments

- 5.13. The schedule of milestone payments agreed at the conclusion of negotiations on the Prime Contract represents the life flow of finance to the Prime Contractor and his subcontractors. At the same time they represent the essential MoD control mechanism to avoid the Prime Contractor being rewarded for poor performance, or the reverse.
- 5.14. In practice when problems occur the Prime Contractor often requires more finance to solve them but the contract provides no mechanism for payment if the problems delay the achievement of the essential milestones. They do therefore represent a very disciplined regime and require firm management by both the Prime Contractor and the PS.
- 5.15. The probability is that the majority of the Prime Contractor's and his subcontractor's personnel and those of MoD will not be familiar with the definition, assessment and application of milestones and it is vitally important to the risks on the project, that they are, with those activities yet to be identified in terms of milestones receiving the attention and priority they require. In addition the process of payment certification needs to be thoroughly thought through and set down as a procedure so that each contributor in the PS Organisation knows his role and follows it This is to avoid the risk that could arise from a misjudgment on a certifiable milestone being made under pressure that distorts the process.

IT Hardware and Software

- 5.16. The basic requirements of the PS Team are
- Wordprocessing.
 - Spreadsheet.
 - Graphics / presentation.
 - Project Management / Planning.
 - Risk Management.
 - Document Control.
 - Database.
- 5.17. The F&S Section also uses specialised packages via the DGFS(S) main frame in Bath for financial monitoring, FOO and LTC purposes. ADC(FS)T Section has plans for links to the Bath Contracts network.
- 5.18. The PCM/FF Section's IT system is considered to be operating ineffectively and is absorbing an excessive proportion of the resources. Historically, the Section identified that the existing DGFS(S) Devonport IT system was inadequate for their specific purposes and they defined their requirements to permit compatibility with the Prime Contractor and sub-contractor RR&A. An 'OPEN PLAN' project management system and other commercial software and hardware was procured but with no regard as to where the expertise was to be found to set-up the applications and support them, either from in-house or externally. Limited assistance from the IT section has subsequently been provided and piecemeal solutions are being achieved permitting the Section to operate without serious limitation. This has inappropriately absorbed a sizeable amount of time within the Section and continues to do so.
- 5.19. The NWA's IT system comprises stand-alone PC's due to the technical and programming difficulties of forming a network. This is creating some problems which are being worked around. NWA PC's connected to the PS Team network are planned in the future to enable the sharing of data if the MoD IT security restrictions permit.
- 5.20. In conclusion, the present ineffectiveness of the PS Team IT system, and connection of the NWA to it, both need urgent attention before Stage 1.

Clerical / Administration Support

- 5.21. The reviewers were advised of concerns regarding the lack of defined clerical / administrative support. Whilst the systems are still settling down it is imperative that the requirements and standard of service be reviewed and plans developed to achieve this. Periods of days for internal distribution of documents cannot be allowed if MoD is to maintain the initiative during the project life.
- 5.22. The late formation of the Clerical/Administrative support group within the PS team taken together with the low level of support it provides for some functions, suggest that management of the group needs to be improved to become more firm and positive. This may occur as the F&S section settles down but if not within a short period,

management action will be required to refocus roles and change attitudes, addressing the resource exchange referred to in 4.7 at the same time.

Outstanding Issues from Previous Reports

5.23. The formal response to the report proposing the D154 Project Organisation (references B10 and B9 respectively) left certain items open for future review. Those reviews have taken place and the reviewers accept the response in Reference B10 unless noted otherwise below. (recommendation numbers are from reference B9) as follows:-

- **Recommendation 2** - 'The recommended D154 PS Organisation is shown in Annex F (para 16) of the Coles report.'

This recommendation is superseded by the recommendations in this report. See figures 8 to 11.

- **Recommendation 6** - 'The dedicated Grade 6 PS be assisted by 3 Grade 7's, one of whom has civil works experience and another who has a strong M&E, nuclear background. The third Grade 7 to be responsible for F&S matters. Additionally the contracts element of the team should be led, at least, by a Grade 7 and more probably by a Grade 6.'

The choice and roles of Grade 7's for the civil works and M&E posts should be carefully assessed against the role of the NWA in these areas, following the guidelines in this report. The requirement for a Grade 7 responsible for F&S matters should be tested further in accordance with the recommendations in this report.

- **Recommendation 15** - 'It is important that thought is given to performance indicators for the NWA.'

This recommendation is still under review by the PS Team and should be implemented both for the NWA and the PS team.

- **Recommendation 16** - 'A formal performance review of the NWA should take place at six-monthly intervals.'

This recommendation is still under consideration by the PS Team and should be implemented.

- **Recommendation 36** - 'Appropriate IT systems will be required to monitor progress against plan onetc.'

As noted in the recommendations below, the IT system has not been fully implemented and should be given urgent attention.

6. Conclusions

Role

- 6.1. The reviewers found conflicting views within the PS Team as to the role of the NWA. This is typified within PCM/FF Section where there is no clear definition of the role and responsibilities regarding their interface with the NWA with a tendency to believe that PCM/FF Section should direct the NWA. Views were expressed on the interface with the NWA varying from complementary roles to the NWA being autonomous.
- 6.2. The roles of the PS Team and the NWA will be dynamic during the currency of D154 but there is currently some duplication of effort occurring between the PS Team and the NWA and confusion about who does what.
- 6.3. The following Sections have well defined roles and no changes are recommended in this respect:-
 - ADC/FS(T) Section.
 - MW Section.
 - F&S Section.

In the case of the F&S Section however the long term absence of WD/FS, his recent replacement and the newness of the team to their role, requires monitoring to make sure that the team is working effectively on the full range of tasks.

Resources

- 6.4. The resources in the PS Team will change significantly as D154 progresses, with an overall downward trend.
- 6.5. The PCM/FF Section is considered to be understrength for the forthcoming Stage 1, but there is not considered to be a need to staff the Nuclear Manager post. All other Sections are adequately staffed for Stage 1 as long as the tender response from DML is not further delayed causing the programme to become critical and undue pressure to be placed on the negotiations and the resources required to conduct and support them.
- 6.6. Following Stage 1 the resources of the PS Team, but primarily ADC(FS)T Section committed to Devonport, should be reviewed downward (see Annex D).
- 6.7. The resources required in the PCMMW Section should naturally follow the planned run-down in staff as the non-D154 work is completed.
- 6.8. The NWA resources, as tendered, meet the current and projected needs. The manner of their tasking may need to be more disciplined for the PS support role if unrealistic pressures are placed on their finite resources.
- 6.9. The initial imbalance between the PS Team and NWA resources progressively change after the Prime Contract is let to balance at the end of stage 4.

Organisation

- 6.10. The organisational structure currently equates closely to that considered to be required for Stage 1, when three of the four vacant posts have been filled. The structure will be dynamic through the Stages of D154, but the functional groupings are expected to remain.
- 6.11. There is a case for the management of all contractual matters off site but it is strongly believed that the projects will continue to benefit from a permanent presence of a contracts officer in Plymouth with the delegation to handle straight forward interpretations of the tender documents..
- 6.12. The various demands on the F&S Section have led to the proposal that the Head F&S should be higher graded, during Stages 1 to 3 to enable a greater degree of delegation locally to deal with Parliamentary Enquiries etc.. It is considered that the Section should settle down and be tested at the current level before this proposal is progressed.

Management

- 6.13. The terms of reference and job descriptions to which staff in the PS Team are working, revealed significant overlaps of responsibilities and the need for the reorientation of the terms of reference of some posts to reflect the roles required to be performed. In addition, with staff being recruited at different times from different parts of the MoD organisation, a tendency was detected for the role some exercised to migrate, reflecting particular preferences, interests and pressures rather than the priorities that the role required.
- 6.14. To enable management to become more positive and focus resources on the key issues, in the way that the NWA support component of their team is directed through their contract, it is suggested that a set of positive deliverables should be formally identified for each post in the PS team in order to achieve the prioritisation of tasks against which performance can be measured and reported at intervals. The tasks identified within this report could provide a fruitful starting point for the definition of specific deliverables for each post. In the absence of such a discipline there is a danger that operational mobility resulting from the dynamics of the project will be seen as an achievement in its own right, with the essential output that is formally required to perform each role, being assumed but not realised.
- 6.15. An evident shortcoming in the current arrangements is the absence of a specific focal point for information on the presence or whereabouts of members of the PS Team. The apparently random distribution of staff within the offices and the occupation of cellular offices which divorce the Grade 7 officers from the teams for which they are responsible and should be supervising, contributes to the situation. The PS Organisation includes the post of Personal Secretary which, although a vital post, has not yet been filled and could normally provide a key management interface for the PS, Grade 6/7 offices and visitors. Until this post is filled the role should be adopted by one of the F&S staff. With the PS Team having such a dynamic requirement in terms of operational mobility, there will be a continuing role for a system of information and control on the whereabouts of all staff and visitors to be developed and performed as part of the Personal Secretary role or F&S function.

7. Recommendations

- 7.1. That the benefits of collocating all the required functional resources of the PS Team at Devonport be recognised and the PS Team now organises its self to maximise these benefits as recommended in the report.
- 7.2. That the organisational structure proposed for Stage 1 and the Planned Structures for the following stages, be adopted as the future staffing strategy for the PS organisation, subject to the assumptions made and the findings of future reviews.
- 7.3. That the stakeholder management proposals currently under development be implemented as soon as possible and procedures put in place to define the requirements of the PS team interface officers and the Principal Planning Officer in order to confirm the resourcing levels.
- 7.4. That the recording of the outline content of communications between the principal stakeholders, the Prime Contractor and his Sub-contractors, particularly RR&A, be instituted by stakeholders and the Prime Contractor as an aid to risk control, the recorded summaries to be regularly reviewed by the responsible interface officer and the Principal Planning Officer or PS.
- 7.5. That a more positive mechanism for translating the results of risk analysis and assessment on risks which reside with MOD in to positive management action, be defined within the PS organisation, including any necessary delegation arrangements not yet in place.
- 7.6. That general training on risk management be applied throughout the PS team to heighten the awareness of risk and assist in its control.
- 7.7. That the IT support provided to the PS team be urgently reviewed in order to make the system more effective for the future roles of the team and their data needs from others, with support available on site for guidance on the application of the software in use and required for the future.
- 7.8. That the clerical/administrative support arrangements be reviewed in order to make them more effective in performance terms and their management more positive.
- 7.9. That the Personal Secretary appointment to the PS be made as a matter of urgency and undertake the role of co-ordinating the movement of key officers as an aid to communication, cohesion and general office management.
- 7.10. That the grading of the Head F & S post be reconsidered when the section has settled down to establish whether there is a requirement or justification to enhance it from SEO to grade 7.
- 7.11. That the 2 specialist support posts at HPTO level in the Future Facilities section be now filled, recognising the reduction in staff numbers to follow in the PS team as the project proceeds to its later stages and the lack of justification for the Nuclear Manager post.

- [REDACTED]
- 7.12. That the features of the more cohesive NWA team that give reassurance be built on when making adjustments to the PS team to give an overall improvement to the operation of the PS organisation.
 - 7.13. That tasking of the NWA be reviewed to place reliance on the NWA team for self tasking on areas where their contract requires them to have responsibility and where their support is required, a defined route be established within each section to identify the nature of the support required and assess its priority.
 - 7.14. That the mechanism for specialist advice to be given by the NWA, inter dependant of the collective view of the PS organisation be defined and preserved as an additional control on risk.
 - 7.15. That performance indicators be developed for all staff in the PS organisation as a basis for performance assessment and comparison, utilising the results of some of the role analysis contained in this report as a starting point.
 - 7.16. That in recognition of the volatile nature of the D154 project and its evolution over the critical stages to follow, further reviews of the PS organisation and its operations be conducted at critical stages or at intervals not exceeding 12 months, by an external team, the next review to take place after the prime contract has been awarded.
 - 7.17. That the procedures to be followed for the verification of milestones achieved by the Prime Contractor and their certification by the project sponsor, be defined and each contributor to the procedure given a timescale that ensures a response to the Prime Contractor and a receipt of payment if appropriate, within the overall period allowed in the contract.



A. ANNEX A: Review Methodology and Assumptions

Methodology

A.1 The review team was staffed as shown below:-

			Review Areas
Team Leader:	[Redacted]	Project Management Consultant	Management Team
Administration:	[Redacted]	WD/FS1	-
Interviewers:	[Redacted]	DWS/SOG	(ADC(FS)T (PCM/MW (NWA
	[Redacted]	DPCM(QIP)	
	[Redacted]	D Works (SS) F&S2	PCM/FF F&S
Coordinator:	[Redacted]	DWS/DWA Plymouth	-

(S. 40)

A.2. Staff in the PS Organisation were interviewed by one of four reviewers in order to

- Assess the requirement for, and establish the present and future workload of the senior posts and the need for support staff, identifying any shortfalls or duplication in functional areas of responsibility.
- Review the working relationship between the NWA and Project Sponsor Team and where responsibilities should fall.

The Nuclear Works Advisor (NWA) was interviewed at NWA and DNWA level only.

A.3. Following the individual interviews the review team assessed the overall resource levels and the organisational need for specific posts against current practice, extrapolated to future Stages of D154.

A.4. The review was not intended to, and did not, investigate the suitability of post holders for their current and projected tasks.

Assumptions

A.5. The review was carried out prior to the achievement of a major milestone - the receipt of tender leading to the appointment of the Prime Contractor. The review, and the results and recommendations assume that MoD will be entirely successful and that DML will accept without qualification the Prime Contractor role and the associated risks. If this assumption proves false and MoD retains key risks, then the total resource and the balance of the PS Organisation may need to be reassessed.

A.6. The reviewers also took account of the early results from the Pre Contract Award Evaluation (PCA/E) of the proposed Prime Contractor, being carried out in parallel with this review.





B. ANNEX B: References

- B.1. D154 - Review of the Project Sponsor's Organisation - Terms of Reference & Implementation Procedure, Issue 02, Aug 94
- B.2. D154 Project Execution Plan (PEP), WDS, Issue 1 D/DGFS(S)/SSD/171/21/2/14
- B.3. Project D154 Phase 2 Invitation to Tender, NFST1A/0506, July 94
- B.4. D151 Task Management Programme, Issue 3, Aug 94
- B.5. CUP Guidance Note No. 33 (Revised): Project Sponsorship, Central Unit on Procurement (CUP)
- B.6. Management of the Trident Works Programme, HMSO 621, National Audit Office
- B.7. Trident Works Programme - The Inquiry, Final Report, DWorks (SS) / Bovis Construction / Nigel Parry, Jul 93
- B.8. NWA Contract Document, NFST1A/0502, Apr 94
- B.9. D154 Project Organisation, D Works SS, Nov 93
- B.10. D154 Project Organisation Implementation Plan, WDS, Mar 94
- B.11. Devonport Nuclear Works Advisor - Bid Clarification, Allott & Lomax, Jan 94
- B.12. D154 Risk Log and Analysis, Issue 1 38004/G/001



c. ANNEX C: Background to Current Organisational Structure

- C.1. The basic organisation of the DGFS(S) PS Organisation, and the need for and role of the NWA, have arisen partly as a direct result of recommendations of an earlier report on the management of previous Trident Works projects.
- C.2. The need for, and responsibilities of Project Sponsorship for D154, whilst basically in accordance with CUP guidance must be assessed alongside key constraints and complexities which, when combined, render this project complex in Works and contractual terms:-
- The current Government Owned - Contractor Operated (GOCO) regime of the dockyard.
 - From Vesting Day in 1996, the planned transfer to a Contractor Owned - Contractor Operated (COCO) regime for the dockyard. This will necessitate transfer of D154 contracts to the new owner.
 - The requirement to appoint a Prime Contractor with total responsibility for the Works. The Prime Contractor will by definition undertake the role of Project Manager.
 - The firm acting as Design Authority for Nuclear Steam Raising Plant (NSRP) and the associated refuelling systems will be a major sub contractor to the project through the Prime Contractor.
 - Major technical challenges, not least of which is the justification of pre-World War 1 maritime structures to current civil standards of nuclear safety.
 - A sizeable risk requirement approaching 50% of the base cost of the Capital Works.
 - A large number of MoD 'Stakeholders' who can directly or indirectly seek to alter the course of the project and / or who fulfill the end-customer role.
 - The recognition that although MoD is funding the facility, it does not intend to own it or operate it but nevertheless requires to be confident that it can and will perform the functions required of it.
- C.3. These constraints combine to place greater managerial responsibility upon the PS than would be the case with a traditional MoD Works project. Certain skills and resources are therefore needed to supplement the normal PS functions in order that the project can be adequately monitored and controlled, whilst not divorcing the Prime Contractor from his direct responsibilities.
- C.4. The management of MoD induced change identified from previous projects requires particular attention when assessing the structure of the PS Organisation.
- C.5. Previous projects have also revealed the requirement to have an independent planning team to assist in formulating programme trends and identify alternative strategies



C.6. The MOD Trident Inquiry revealed that management of the Trident projects should have been organised around the strategic requirement and its programme and not around the individual specialisms or areas of responsibility.



[REDACTED]

expertise, quality system, risk management, ARM & TLC proposals, maintenance plans and records policy.

Stage 1 - Table 5

- D.6. The prime function of this PCWFF Section will be to ensure that all Stakeholder requirements have been adequately identified and included in the tender submitted.
- D.7. In addition to this task will be a need to identify and examine the technical implications and resolve any particular contractual strategies, exclusions and caveats that the Prime Contractor adopts and make suitable recommendations to the Contracts Officer.
- D.8. There will also be a strong tendency for Stakeholders to seek to change their requirements once the tender is available; this will need firm control with a review of the associated risks.
- D.9. PCWFF will retain oversight of the NWA in several areas of their review of the tender submitted.
- D.10. The initial resource requirement is considered to be very similar to that indicated in the present structure requiring:-
- 1 Grade 7.
 - 2 SPTO's.
 - 4 HPTO's.
 - 1 PTO.
- D.11. More specifically, the roles will be:-
- Overall management of the Section.
 - Management of Stakeholder input: to the verification of RR&A Interface, integration of decontamination plant, nuclear storage and refuelling facilities.
 - Management of Stakeholder input to M&L utilities, MOD Form Alpha, reliability targets, weapon system support, and docking requirements.
 - Through support staff with delegated responsibility for Stakeholder Management covering:-
 - Mechanical utilities, MOD form alpha compatibility and reliability targets.
 - Naval architecture / berthing & docking facilities. This post should be filled soon to allow contacts to develop prior to the Prime Contractor's response to ITT.
 - Electrical utilities, MOD form alpha compatibility and reliability targets.
 - Weapon system support. This post should be filled as soon as practical to allow contacts to develop prior to the Prime Contractor's response to ITT.
 - Internal Quality Assurance systems.

- Preparation of contract documents, amendments, correspondence etc., negotiation of terms, conditions and contract prices.
- Liaison with PS team regarding technical and financial requirements.
- Liaison with contractors in administration of contracts.

D.20. In addition to Devonport duties ADC(FS)T retain responsibility for Trident-related contracts at Faslane / Coulport. To support this requirement an HEO, EO and AO are located in Bath with line responsibility to SEO / Grade 6 Devonport.

D.21. The present resources committed to Devonport and required for Stage 1, is as follows:-

- 1 Grade 6.
- 1 SEO.
- 2 HEO.
- 1 EO.
- 1 AO.

Stage 1 - Table 5

D.22. An intense period is expected after the D154 tender is submitted to agree a contract. This is likely to coincide with evaluation / negotiation of D151 Ph2 and possibly D155B contracts and possibly claims negotiation on existing contracts. Difficulties on project D155B are currently generating a workload disproportionate to the project size, with similar expected on D151 and later D155A. The various projects ought to involve the following during this Stage:-

- D151 Ph2 evaluate tender and negotiate contract
- D154 Ph2 evaluate tender and negotiate contract
- D155A place contract for option study, prepare ITT for PC, evaluate tender and negotiate contract
- D155B contract award, final payment
- D58/2 prepare ITT for project manager appointment, evaluate tenders, contract award
- NWA administer contract

D.23. Assuming a successful outcome to the negotiation of the Prime Contract the contracts role should diminish significantly but in the short term needs to be maintained with full-time personnel located at Devonport.

D.24. The liaison link to the Dockyard Privatisation team needs to be maintained to ensure that the Works contract is readily capable of novation to the new owner.

- D.25. This section, as presently staffed, should be capable of dealing with the peak workload which is forecast over the next few months. However, anticipating a period of intense negotiation, the Grade 6 and SEO will have to remain dedicated to Devonport within this period. Commitments to other work is outside the scope of this review but it is expected that ADC(FS)T will prioritise the Devonport work.

Stage 2 - Table 6

- D.26. Contracts support will be required to service the following projects
- D151 Ph2 administration, claims negotiation, final settlement
 - D154 Ph2 administration, claims negotiation
 - D155A administration, claims negotiation, final settlement
 - D58/2 appoint contractor based upon project manager's recommendation, administer project manager's contract, final settlement
 - NWA administer contract
- D.27. The pre-requirement for full-time Grade 6 or Grade 7 dedicated to D154 cannot be sustained if the true nature of the Prime Contract is realised. The EO/AO requirement may be waived if admin / clerical support is made available from elsewhere within the Project Sponsor Organisation.
- D.28. It is essential that off-site senior management is kept fully informed of all contractual developments in this period in order to be able to rapidly mobilise a task force if appropriate.

Stage 3 - Table 7

- D.29. The resources required will diminish as a result of projects having been completed in the previous phase. The remaining contracts will be D154 Ph2 and the NWA for which administration and claims negotiation functions will be required.

Stage 4 - Table 8

- D.30. As for Stage 3, but more input at SEO level will likely be required to finalise the Prime Contractor's and the NWA's contracts.

Finance and Secretariat (F&S) Section

- D.31. Following a period of recruitment, the resource level of the F&S Section has only very recently been fully manned as complemented. None are full time on D154. Collectively there is a less than ideal level of F&S experience of major works projects (training courses are being arranged) and consequently the identification by the incumbents of how the task and role will develop through the project stages was sketchy. It was reassuring that the executive grades were all aware of the previous reports on the Management of the Trident Works Programme. They were aware of

the high profile that D154 will attract and displayed a keenness to be part of a successful PS Organisation.

D.32. Resources currently available

- 1 x SEO filled in very recently by HEO on deputising allowance
- 1 x HEO postholder in post from May 94
- 1 x EO postholder in post from Jun 94
- 2 x AO postholders in post from mid Aug and early Sep 94

D.33. The five currently complemented posts have only all been concurrently filled from 4 Sep 94. At the time of interview the two AOs had not seen their Job Descriptions. The incumbents, because of their newness in posts and lack of previous experience of major works projects, were unable to foresee how their and the F&S section's roles might develop and change through the different stages of the D154 project to its physical and financial completion.

D.34. The F&S section are not solely committed to D154, but provide a F&S service to ADS/WD covering all other property/assets matters within the area licensed to DML under the Term Contract. Non-D154 activities are estimated by the incumbents to take variously up to 30% of their time at present. The sale of the Dockyard will, however, remove the property management and minor works tasks from ADS/WD and the F&S section.

D.35. The F&S section is currently supporting the PS in finalising the submission to CDP, MOD and Treasury Ministers for formal approval to issue the invitation to tender for the Prime Contract for D154 to DML. Other D154 work includes the usual monitoring, payment and reporting duties in connection with the NWA contract. Future tasks on D154 will include the following normal range of F&S tasks; and atypical ones that arise out of the project's partial Trident attribution, including a high political and Parliamentary profile:-

- Budgetary Forecasts of Outturn
- Enquiries and Briefings
- Processing of Alternative Assumptions
- Visits
- Reports
- Parliamentary Business
- Statutory Responsibilities, assisting PS

D.36. The F&S section additionally supports ADS/WD's non-D154 projects and property management responsibilities.

D.37. The current postholders' collective newness in post and inexperience of major works projects make it difficult now to propose with the degree of confidence preferred specific roles and resources at each project stage. The analysis of resources required therefore reflects to a lesser extent than desirable the views of the postholders, and

Project Planning Officer (PPO)

- D.47. PPO's prime responsibility will be the management of major Stakeholders defining the scope and timing of refits and / or who will be the customers of the new facilities.
- D.48. The PPO will also be required to advise the F&S Section on enquiries, as regards planning issues, in support of the F&S function.
- D.49. Minor duties will include internal reviews of the management procedures, project history and archiving, which are likely to involve:-
- Public Records Office requirements.
 - Publications.
 - Lifetime records, to be prepared by the Prime Contractor.
- D.50. The resources required to staff the above functions is likely to amount to one senior person for the duration of D154, tailing off to a part-time presence during the final Stage 4.

Major Works Section (MW Section)

- D.51. Their contribution to D154 tender evaluation, apart from security aspects, will be difficult due to commitments on other projects. This may create difficulties in assessing refuelling aspects of D154 where the input from DPS2, although perhaps not necessary, could be advantageous, in terms of lessons learnt on D155 and the ongoing Nuclear Fuel Working Party (NFWP).
- D.52. Activities are focused on Sponsorship of non-D154 projects, and these are detailed at Annex E.
- D.53. Stakeholder Management duties relating to the physical security aspects of D154 are delegated to the MW Section, along with ad hoc civil engineering advice to the PS. These duties will continue through all four stages of D154 on a diminishing basis, although the requirement for the latter should be reviewed as noted at para 6.13.

ANNEX E: Review of Major Works Section (PCM/MW)

- E.1. Major Works Section PCMMW are responsible for non-D154 projects. It also has limited responsibility on D154. Due to this overlap with D154, the potential for exchanging resources and line management responsibility to ADS/WD, this Section was reviewed during the various stages of D154.

Specific Roles and Resources Required in PCM/MW Section at Each D154 Project Stage

- E.2 During D154 Stage 1 A sponsorship function is required to support other projects which will be at the following stages during this stage of D154
- D151 - outstanding design and construction
 - D155A - option study, design
 - D155B - contract award, active commissioning, final payment
 - D58/2 - project manager appointment
- E.3. In addition PCMMW Section carries out the Stakeholder Management of physical security aspects of project D154. This is attributable to the preferred requirement for a MoD Staff Officer in this role. There is also overlap between the PCMMW Section and the PCM/FF Section in duties relating to the refuelling system aspects of projects D151, D155 and D154.
- E.4. PCMMW is being consulted in the civil engineering aspects of D154, with direction from ADS/WD to oversee the NWA in their review of the viability of the Prime Contractor's technical proposals on geological faulting / seismic, dock wall stability, maritime and construction issues. This function is not considered to be required in accordance with para 6.13.
- E.5. The Task Management Plan (TMP) for D151 suggests that there will be overlap with the NWA's responsibilities, including the refuelling / nuclear safety case side which needs attention.
- E.6. The workload tends to vary significantly and to a certain extent unpredictably resulting in a reactive approach being necessary in some periods. A set routine is beginning to develop however as the workload normalises. Regular internal and external meetings are held, relating mostly to non-D154 projects, with ad hoc meetings often with briefings or debriefings with the NWA. NWA liaison was particularly onerous during the induction period. The review team was advised that approx. 15% of the PCMMW Section time is spent on D154 activities.
- E.7. During this period the likely concurrence of D151 and D155B tender evaluations will provide a peak in workload. The profiles of these two projects are heightening with pressure to commence construction of D151 being applied by the NII. To cover these projects along with D155A and D58/2 will require the full-time commitment of the Grade 7 PCMMW with support from the HPTO's who have delegated responsibility (see Figure 8).

This structure should enable PCMMW to fulfill his obligations on the D154 tender evaluation in terms of physical security requirements. The sharing of work will be a necessity during times of peak loading.

E.8. In addition, specialist support is required in the following areas

- Nuclear Safety Case for D151 and D155 (A&B).
- Construction services including health and safety and risk management.

E.9. During D154 Stage 2 Whilst detailed design of D154 progresses the PCMMW Section will retain PS responsibility for oversight of

- D151 - construction
- D155B - active commissioning
- D58/2 - design and construction
- D155A - design and construction, due to complete end of 1995.

These are combined with Stakeholder Management responsibilities for D154 physical security, and ad hoc advice on civil engineering as above.

In addition, specialist support will be required on a diminishing basis for the Nuclear Safety Cases of D151 and D155(A&B) and construction services including health and safety and risk management.

E.10. These duties will sustain the team through the initial part of this stage, with some tailing off in late 1995. To cover these projects will require the full-time commitment of PCMMW with supporting HPTO's.

The requirement for 3xHPTO's will diminish to 2xHPTO's in late 1995 and 1xHPTO in early 1996.

E.11. During D154 Stage 3 When construction of D154 commences in mid-1996 all other Works projects ought to be complete and therefore the need for resources to be committed to these is obviated. Stakeholder Management of D154 physical security and ad hoc advice on civil engineering will continue however, estimated to require 0.25x Grade 7.

E.12. During D154 Stage 4 As for para E.11.

Specific Posts and Job Descriptions

E.13. PCMMW Section is headed by a [REDACTED] acting as Grade 7, supported by 3xHPTO. Job descriptions currently support the principal role of PCMMW Section as Project Sponsorship.

Comparison between Resource Required and Resource Available

- E.14. The acting Grade 7 is due to depart in Sept 96 when his role should be largely completed. DPS3 is temporary and is due to leave post, without replacement, in Jan 1996, DPS2 is due to transfer to the D154 PS Team at some stage to be agreed. DPS1 currently resides with the Property Management Section on an open ended commitment.
- E.15. The PCMMW Section, as presently staffed, should be able to manage the Sponsorship workload forecast for all D154 project stages. However, the contribution to the D154 tender evaluation, apart from security aspects, will be difficult.
- E.16. The NWA's current assessment of the commitment they will need to give the projects sponsored by the PCMMW Section projects is reasonable and is being borne out in practice, with the exception of the construction and commissioning stages of D151, for which nuclear engineering appears low.