H.P.O. 3

HOSPITAL PLANNING OFFICE GUIDELINES

HEALTH BOARD PROJECT TEAMS

HOSPITAL PLANNING OFFICE
DEPARTMENT OF HEALTH
CUSTOM HOUSE DUBLIN 1
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Hospital Planning Office 3

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I N D E X

PROJECT TEAMS

1. Preamble

1.1 This document to be read in conjunction with the Hospital Planning Office Guidelines - The Health Board as Building Client (Hospital Planning Office 1) and Expenditure on Capital Projects by Health Boards (Hospital Planning Office 2). Also the Indentures of Engagement for members of the design team and Schedules A, B and C attached thereto.

1.2 This paper describes the work of a project team in the briefing, design, construction and commissioning of hospital building projects under classification 3.1 (d) Hospital Planning Office Guidelines (Hospital Planning Office 2).

1.3 The assessment of need must be decided by the health board in the first instance and agreed with the Department of Health before the project team commences work.

2. Definitions

2.1 The definitions and terms used are as follows:-

2.1.1 Assessment of Need

The process of deciding the health services facilities appropriate to the project related to national norms.

2.1.2 Brief

The clients narrative statement of the requirements as to content, cost, staffing and time scale

2.1.3 Budget Cost

The cost of the project inclusive of building and services, but excluding loose furnishings and fees.

2.1.4 Design Team

The group engaged by the client (represented by the project team) to prepare the necessary documentation based on the brief and to supervise the execution of the project. It will normally consist of the architect, consulting engineers for civil and structural and mechanical and electrical services, and the quantity surveyor.

2.1.5 Development Control Plan

The design teams outline plan(s) indicating the relationships and sizes of the various departments and the general massing and disposition of the buildings.

2.1.6 Functional Content

A translation of the assessed need into the exact number of units of accommodation, such as the range and scope of the supportive departments, e.g. x-ray, operating theatres, out-patients, kitchen, dining facilities, etc.

2.1.7 Management Control Plan

The programme prepared by the architect in consultation with the other members of the design team indicating how the project is to be developed within the time scale set by the project team.

2.1.8 Operational Policies

A statement of the manner in which a facility is intended to be used. Whole-hospital policies affect the entire hospital or many of its departments while departmental ones only affect individual departments.

2.1.9 Parallel Working

The system whereby individual members of the design team continue to develop their proposals into the next stage while waiting for approvals to the completed and submitted previous stage.

2.1.10 Project Team

The multi-disciplinary group established to draw up the brief and subsequently to monitor the planning, designing, building, equipping and commissioning of the hospital.

3.- Preparation of Documents

For projects in the category referred to in 1.2 the various stages in the preparation of documents will be as follows:-

Stage 1 Client Brief

The client's brief to the design team will consist of the following information:-

1.1 Functional content

1.2 Operational policies

1.3 Schedule of accommodation

1.4 Secondary Brief: (a) civil & structural engineering requirements

(b) mechanical & electrical engineering requirements.

1.5 Budget cost and phasing

1.6 Staffing estimate

Design Team Documentation

Stages 2, 3, 4, 5, 6.

Stage 2. Development Control Plan(s). Preliminary design drawings and Budget Cost

2.1 Clarification of brief

2.2 Management control plan (plan of work) up to start on site.

2.3 Site appraisal and preliminary report

2.4 Development control plan(s)

2.5 Preliminary design drawings

2.6 Preliminary specification

2.7 Reports on engineering services : (a) civil & structural

(b) mechanical & electrical

2.8 Cost control verification and apportionment of budget cost.

Stage 3. Sketch Design and Cost Plan

3.1 Developed sketch design, major equipment schedules, room data sheets.

3.2 Detailed architectural specification

3.3 Engineering proposals : (a) civil & structural

(b) mechanical and electrical engineering services drawings (preliminary).

3.4 Cost control elemental cost plan

Stage 4. Constructional Drawings and Specification

4.1 Architectural working drawings, including site plan, details, schedules.

4.2 Final building specification

4.3 Engineering working drawings, specification, details and schedules -

(a) civil & structural (b) mechanical & electrical

4.4 Cost control final elemental cost plan

Stage 5. Quantities, Tendering Procedures and Conditions of Contract

5.1 Bills of quantities

5.2 Confirmation of cost plan based on quantities

5.3 Tendering procedures and conditions of contract

Stage 6. Tenders

6.1 Examination and report on tenders by design team

6.2 Placing of contract

4. Activities of Project Teams

The activities of a project team will comprise the following:-

4.1.1. develop and prepare the client's brief for the design team;

4.1.2 determine the budget, approve cost planning, cost procedures and monitor expenditure;

4.1.3 make the necessary arrangements for the appointment of the design team;

4.1.4 decide the time scale within which the briefing activities must be completed;

4.1.5 decide the time scale within which the design team must complete production documentation;

4.1.6 consider and approve of all submissions from the design team;

4.1.7 monitor progress of the project in accordance with the approved programme;

4.1.8 agree contract procedures in consultation with the design team;

4.1.9 arrange in consultation with the design team for the appointment of a contractor;

4.1.10 monitor cost control during the course of the project;

4.1.11 approve payment of professional fees at appropriate stages;

4.1.12 represent the client in all aspects covering the management of the contract;

4.1.13 set up commissioning organisation for equipping of the project and monitor progress in this activity;

4.1.14 decide and undertake handing over procedures in conjunction with the design team;

4.1.15 arrange for submission of final accounts by the appropriate members of the design team and for obtaining all necessary approvals prior to settlement.

5. Composition of Project Teams

5.1 It is desirable that project teams should be kept as small as possible if they are to make progress and reach a concensus of opinion. Only those who have a valid contribution to make towards the project should be members of the team. This is not to preclude personnel who have specialist knowledge in

certain aspects of the project from contributing. On the contrary the team will be the vehicle through which their expertise will be channelled and evaluated in relation to policy formulation for the whole hospital. In this way an objective view can be taken and the danger avoided of placing undue emphasis on individual sections or specialties. The decision to include or exclude requests made by the hospital staff will rest with the project team.

5.2 Membership of the project team should include the Chief Executive Officer or the programme manager concerned with the hospital care service involved (it may be considered desirable that both should be members). In addition there should be experienced medical and nursing representation from the staff of the hospital concerned. It will be the responsibility of such representatives to consult with and obtain the agreement of their colleagues and report back the concensus view of the personnel concerned. It may be necessary on occasion to request the attendance of such hospital personnel at any meeting of the project team where matters relevant to their spheres of interest are being considered.

5.3 The Department of Health and Hospital Planning Office representation will consist of a medical planner, an administrator and an architect. It will be necessary from time to time (depending on the stage reached) to co-opt on an ad hoc basis officers of further discip-

lines such as civil/structural or mechanical/ electrical and cost control. Such officers will be provided from the Hospital Planning Office staff.

5.4 The involvement of individual members of the project team will change as the work progresses. Once the brief has been prepared and given to the design team the emphasis will henceforth be on monitoring the design and progress through the various stages commencing with approval to the management control plan.

5.5 Unless there are unusual circumstances attaching to a project it will be expected that after the completion of Stage 1 in the preparation of documents the attendance of the departments administrative representative will not be required. During stages 2 and 3 the composition of the team (with the exception of this officer) will remain unaltered although the need for medical and nursing specialist advice is diminished once Stage 3.1 is passed and unless departures from the approved brief are being considered. The completion of Stage 3.4 finalises the design solution which should be "frozen" from this point onward.

5.6 At Stages 4, 5 and 6.1 the development of the planning in conjunction with the design team will become the responsibility of a special sub-group. They will also be responsible to see

that the management control plan is being adhered to. The composition of this group would be as follows:-

Chief Executive Officer or Programme Manager	Health Board
Technical Services Officer	
Project Secretary	
Architect	Hospital Planning Office
Engineer (civil and structural)	
Engineer (mechanical and electrical)	
Quantity Surveyor	

With the exception of the architect all the Hospital Planning Office officers listed need not attend meetings unless their particular speciality is involved.

5.7 Departures from the approved brief must not be made without the prior consent of the Chief Executive Officer. The sub-group referred to at 5.6 above will meet as frequently as required to monitor the progress of the design team and to keep a check on the planning and cost control elements. Subject to the requirements laid down under Hospital Planning Office Guidelines this group will suggest the tendering procedures to be adopted and will report on such matters to the project team who will be the decision making body in this respect. The project team will be responsible for seeing that all documentation is submitted at the appropriate stages and for compliance with requirements regarding permission to advertise the project as well as for the acceptance of tenders

and the obtaining of the necessary approvals to same from the health board and the Hospital Planning Office.

5.8 Unless there are special circumstances which would involve consideration by the full project team it is envisaged that the Hospital Planning Office representatives will not be required once the contracts have been awarded. Neither is it necessary to involve the health board's medical or nursing staff save in so far as commissioning is concerned.

5.9 Stage 6.2 of the project (placing of contract) will include the holding of regular meetings with the architect and/or other members of the design team, the acceptance of a building programme, control of extras and variations, monitoring and forecasting expenditure on building, equipment and fees as well as incidental expenses such as site supervisory salaries etc. There will also be the processing of applications for payment on foot of architect's certificates. This day to day management of the project will be the responsibility of the chief executive officer or the person designated by him, e.g. the appropriate programme manager who will be assisted by the technical services officer.

5.10 Consultation may, however, take place as necessary and desired with other members of the sub-group referred to at 5.6 Regular progress reports on an approved

format will be submitted direct to the health board by the chief executive officer and a copy forwarded for the information of the hospital planning office. During this stage the specially commissioned sub-group should be established (see paragraph 17).

5.11 *Exhibit 1* overleaf indicates the proposed representation at all stages of the project.

6. Project Secretary

6.1 A project secretary should be appointed at the outset. The person to be appointed should be a senior officer of the health board and be responsible for taking and transmitting clear and concise records of all decisions or other aspects of the project team's deliberations. It is essential that copies of all reports should be circulated to the members of the group well in advance of meetings in order that individual members will have time to consider them. As the same time a separate copy should be furnished to the Hospital Planning Office for record purposes. Apart from recording decisions taken at meetings it will be the secretary's job to co-ordinate the activities of the team, to arrange meetings and visits and to supply any information required by members from time to time to enable them to fulfil their role. The project secretary will be required to ensure that good lines of communication are maintained between all members of the project team as well as those whom they are required to consult. The necessary

EXHIBIT 1

Composition of Project Team at all stages of the Project

	HEALTH BOARD REPRESENTATION						Department of Health/Hospital Planning Office - Representation		
Stage 1	Med	Med	Nur	CEO P.M.	Sec.		Arc.	Med.	Adm.
1.1 Functional Content									
1.2 Operational Policies									
1.3 Schedule of Accommodation									
1.4 Secondary Briefs							Ad Hoc Representation		
1.5 Budget Cost & Phasing					TSO		Eng C/S	Eng M/E	Q.S.
1.6 Staffing Estimate									
Stage 2	Med	Med	Nur	CEO P.M.	Sec	TSO	Arc.		Med
2.1 Clarification of Brief									
2.2 Management Control Plan									
2.3 Site Appraisal and Preliminary Report							Ad Hoc Representation		
2.4 Development Control Plan(s)							Eng C/S	Eng M/E	Q.S.
2.5 Preliminary Design Drawings									
2.6 Preliminary Specification									
2.7 Reports on Engineering Services									
2.8 Cost Control Verification of Budget Cost									

Stage 3

3.1 Sketch Design, Equipment Schedules, Room Data Sheets

3.2 Detailed Architectural Specification

3.3 Engineering Proposals

3.4 Cost Control - Elemental Cost Plan

Representation as for Stage 2

Note, Brief is "Frozen" at this point

Stage 4	Health Board			H.P.O.		
4.1 Architectural Working Drawings Details Schedules	P.M,	SEC	TSO	ARC		
4.2 Final Building Specification				ENG. C/S	ENG. M/E	Q.S.
4.3 Engineering Working Drawings, Specifications, Details and Schedules (C & S M & E)						
4.4 Cost Control - Final Elemental Cost Plan						

Stage 5

5.1 Bills of Quantity

5.2 Confirmation of Cost Plan

5.3 Tendering Procedures and Conditions of Contract

REPRESENTATION AS FOR STAGE 4

Stage 6

6.1 Examination and Report on Tenders

6.2 Contract

REPRESENTATION AS FOR STAGE 5

Stage 7	Med	Nur	P.M,	Sec	TSO	ADM	Med	Nur
7.1 Equipping and Commissioning	Health Board					H,P.O,		

Key;

MED	=	MEDICAL
NUR	=	NURSING
P.M.	=	PROGRAMME MANAGER
SEC	=	SECRETARY
TSO	=	TECHNICAL SERVICES OFFICER
ADM	=	ADMINISTRATIVE
CEO	=	CHIEF EXECUTIVE OFFICER
ARC	=	ARCHITECTURAL
Q.S.	=	QUANTITY SURVEYOR
ENG./ C.S.	=	Civil and Structural Engineer
Eng./ M/E	=	Mechanical and Electrical Engineer

liaison with the Department of Health and the Hospital Planning Office will also be the responsibility of the project secretary. To avoid delays in producing documentation it is vital to provide adequate clerical and secretarial assistance. Following the appointment of the design team the secretary will continue to act as liaison officer between the project team and the design team.

7. Management Organisation

7.1 The first task of the project team will be to agree routine procedures for their work. The following is a typical list of the items requiring consideration and decision:-

7.1.1 Appointment of Chairman and Deputy

7.1.2 Venue, frequency and duration of meetings

7.1.3 Secretarial Services

7.1.4 Quorum

7.1.5 Preparation of agendas

7.1.6 Recording of minutes and decisions

7.1.7 Circulation of minutes and information

7.1.8 Consultation procedures/sub-committees

7.1.9 Visits

7.1.10 Filing

7.1.11 Programme

7.1.12 Appointment of design team

7.1.13 Format and Contents of Brief

7.1.14 Liaison with the Department of Health

7.1.15 Printing, Xerox copying etc.

7.1.16 Expenses

8. Time Scale

8.1 As part of the management organisation the project team will need to establish a timetable for carrying out its task of preparing the brief. This will take the form of a bar chart allocating the time for each activity up to the completion of the brief.

8.2 It will usually require approx. six months to prepare the brief depending on the frequency of meetings and the readiness with which documentation can be processed and made available. In addition the brief to the design team will include a time scale for the preparation of documents up to tender stage from the time of their acceptance of the brief through all stages of preparation and submissions (both to the health board and the Hospital Planning Office). For a project within the range of 300 to 400 beds the preparation of the necessary documentation up to tender stage could take approximately 2½ years.

9. Documentation for Brief

9.1 Because of the long standing close association of the officers of the Hospital Planning Office in the preparation of documentation for large hospital projects the task of providing the material for the brief in the initial stages of the project will devolve on them. The preparation of a preliminary staffing estimate will be the responsibility of the health board representatives on the project team and should be agreed with the Department of Health.

9.2 While each project will be different and require individual solutions to meet special requirements (e.g. content, siting, existing accommodation) nevertheless similarities in general content and scope will enable certain basic documentation (e.g. functional content, whole hospital operational policies, departmental operational policies) to be prepared in advance and to form the basis for discussion at the team meetings.

9.3 The brief will be prepared by the project team and will consist of the following:-

9.3.1 Statement of Assessment of Need (as agreed between the health board and the Department of Health)

9.3.2 Functional Content

9.3.3. Operational Policies

(a) Whole Hospital

(b) Departmental

9.3.4 Schedules of Accommodation (in draft form initially and subsequently in detail with floor areas inserted).

9.3.5 Secondary brief

(a) Civil/Structural

(b) Mechanical/Electrical

9.3.6 Budget cost figure

9.3.7 Time Scale

9.3.8 Staffing schedule. A list of the proposed staffing of the hospital set out on a depart-

mental basis and including all disciplines and grades of staff and whether they are whole or part-time, resident or non-resident.

9.3.9 Conditions of engagement, preparation of documents, scale of fees and form of indenture for issue to all members of the design team.

10. Schedule of Accommodation

10.1 This is the list of rooms derived from the functional content and the operational policies. It will be the basis for calculating the approximate circulation and communications requirements leading to a total gross floor area and the establishment of the budget cost. Standard allowances for circulation and communications will be adopted at the initial stage but will be subject to later refinement as the planning progresses. Initially the accommodation will be described in outline and when this has been agreed translated into a detailed schedule with floor areas for individual rooms. In order to eliminate unnecessary waste and consequential costs all requirements should be subject to close scrutiny before inclusion in the schedule.

11. Budget Cost

11.1 It is the project teams responsibility to determine the budget costs which will be based on the schedule of accommodation and will be provided for the design

team as part of the brief. For the purpose of obtaining approval to the project, however, the clients total budget should indicate separately the budget set for the design team, all professional fees and site supervisory salaries also the cost of loose furniture and equipment not forming part of the building and services contract (the design team budget). The estimates for fees and furnishings shall be based on a percentage figure related to previous jobs of a comparable nature. Information on the appropriate percentage figures can be obtained from the Hospital Planning Office.

12. Appointment of Design Team

12.1 The Department of Health should be consulted in accordance with the requirements of paragraph 6.1 Hospital Planning Office Guidelines - Expenditure on Capital Projects by Health Boards (Hospital Planning Office 2).

12.2 The architect and other members of the design team should be appointed prior to the completion of the brief so that certain exploratory work could be undertaken, e.g. surveys of existing buildings, site appraisal and levels, extent of services available etc. Prior approval should be obtained from the Department of Health as to the methods proposed for making the appointments and agreement should be reached on these sufficiently in advance of the completion of the brief. Subject to the

requirements of public policy appointments should normally be made following public advertisement and the setting up of special interview panels.

12.3 The appointment of the members of the design team will commence with that of the architect who will lead and co-ordinate the entire design and construction process. The remaining disciplines required to complete the team will be a civil and structural engineer (either one or two appointments), a mechanical and electrical engineer and a quantity surveyor.

13. Management Control Plan

13.1 On receipt of the brief the architect in consultation with the other members of the design team, will be required to prepare a management control plan showing how it is proposed to carry out the task within the time scale and the conditions laid down by the client. This document will indicate the time allocated for the different stages of the work up to tender stage as well as for formal submissions to the project team and the Hospital Planning Office as laid down in the preparation of documents (referred to at 3). Being a key document it will need to be carefully studied before acceptance to ensure that adequate time has been allocated to each of the activities mentioned.

14. Development Control Plan

14.1 This is the first plan which will be submitted to the project team. It will indicate in broad outline the architect's concept of the brief. A number of development control plans may need to be prepared before approval is given at this stage. Sufficient time should be allowed in the management control plan for this contingency. It will not indicate detailed departmental layouts but be in block form only to show the relative size and relationship between the various departments and the general philosophy underlying the solution. As part of the development control plan it may, however, be necessary to provide single line diagrammatic layouts of the major departments to satisfy the project team about the arrangement of the accommodation particularly as regards natural lighting and ventilation.

14.2 Where phased development is required the extent of such phasing shall be indicated on the development control plan.

15. Parallel Working

15.1 To maintain continuance of the planning process and to ensure that the time scale will be adhered to it will be necessary for the members of the design team to accept a system of parallel working.

In large and complex projects of this kind the different disciplines in the design team should evolve a reasonable working arrangement amongst themselves so as to ensure the preparation of documentation will be a continuing process.

16. Contractors Programme

16.1 The successful contractor will be required immediately post-tender stage to produce a programme of the work based on the agreed contract period stated in the tender (critical path or bar charts or both may be required). The times allocated to the various sub-contracts will require the prior agreements of the major sub-contractors before being submitted to and its acceptance by the project team. In addition critical dates for the ordering of special equipment covered by P.C. or provisional sums should be clearly set out in the programme so as to ensure deadline dates are adhered to.

16.2 Most of these items will be dealt with by the group referred to in paragraph 5.9 but items such as commissioning will require specialist in-put and the preparation and approval of schedules and lists as well as cost implications.

17. Commissioning

17.1 The commissioning of the hospital will require

the services of a specialist sub-group consisting of the following:-

Programme Manager Medical Personnel Nursing Personnel T.S.O. Secretary	Health Board
Medical Personnel Nursing Personnel Administrative	Department of Health

17.2 The commissioning sub-group whose duties would include drawing up the lists of equipment not included in the building contract will report to the project team at regular intervals working to a prepared programme indicating the time scale for the activities involved. The Departmental representatives will be in a position to provide detailed schedules as the basis for calculating the extent and type of equipment required.