



## 2. Methodology

Feasibility Planning involves a methodical study, which is documented and presented to assist in sound decision-making by private and public healthcare facility owners, operators, investors and developers. The minimum typical structure is described below.

### 2.1 Executive Summary

Provide a one page summary of the proposal and cover as a minimum the following:

- Name of the project
- The author of the Feasibility Study
- Location – provided through a diagram or map
- Key features
- Key quantities, numbers, size
- Timeframe for delivery
- Estimated Capital Cost

### 2.2 Strategic Context

The study should briefly establish the strategic context of the proposal. The typical elements of the strategic context are:

- The regulatory framework
- The current state of the healthcare industry
- Population factors
- Existing facilities reaching their limits or too hard to upgrade
- New neighbourhoods and population centres
- New technology changing the patients' expectations
- Market opportunities, including Medical Tourism
- Opportunities to introduce new treatments
- Desire for healthcare reform and increased efficiency
- New Models of Care to suit new facilities and treatments.



## 2.3 Investment Objectives

Each project involves an investment of time, money and valuable human resources. Here, the study should briefly describe the main Objectives of the Investment. The stated objectives should be an honest representation of the aims rather than what may be regarded as the “expected” answer.

So, the Investment Objectives should be about what needs to be achieved rather than immediately justifying the pre-conceived solutions. The Investment Objectives should be used as a basis for the evaluation of the options within the study. Typical Investment Objectives may be:

### **New Facilities and Services:**

- Create and run a profitable healthcare business to meet the needs of the growing population
- Expand the existing network of services to focus on the growing demand, for example, integrated Oncology Services
- Create a new facility in a new population cluster which is not well served by existing facilities
- Create a new Clinical Services block to replace the existing, ageing facility which no longer complies with the required facility guidelines

### **Existing Facilities and Services**

In the case of existing facilities being upgraded, describe the key problem areas which have been identified, together with the opportunity to improve through the project development.

The problems may have been reported by the staff, through a complaint processing system, via regulator inspections or advice from consultants. Opportunities may be identified through internal consultation with the staff, engagement of specialist consultants, research or by following the recommendations of the Guidelines. The following should be covered on a case by case basis, when applicable:

### **Problems**

- Major reported problems
- Complaints from patients
- Complaints from staff



- Capacity constraints
- Internal risk assessment reports
- Conditions of Accreditation inspections
- Non-compliances with DHA Guidelines

### **Opportunities**

- Minor or major refurbishment/ remodelling of facilities
- Expansion of facilities
- New facilities
- Change of use
- Change of Models of Care
- Introduction of new systems and technologies
- Introduction of new services.

## **2.4 Needs Analysis**

It is necessary to follow and demonstrate a rational process of Needs Analysis as the foundation of the proposal. Refer to the components of the Dubai Capacity Plan, published by the DHA from time to time for fundamental and locally specific service planning information. The minimum steps required are as follows;

### **2.4.1 Define Health Service Catchment**

Define the catchment for the proposed services and facilities. Depending on the nature of the proposal, this may be a simple statement of:

Population Numbers	The current or future population to be served e.g. 500,000 in 2012, projected to grow to 1m by 2020. The basic information on population numbers may be obtained from relevant health authorities and statistical centres.
Geographic Definition	Define the geographic catchment intended or estimated e.g. 80% of the new residential neighbourhood of XYZ and 15% of the each of the adjoining neighbourhoods.
Population Type	Define the population types targeted e.g. citizens, residents and inflows from other regions/countries.



The above may be defined and described by words and schedules and, when appropriate and possible, by maps.

### **2.4.2 Health Service Demand Assessment**

The study should provide an estimate of the minimum demand for the intended healthcare services in the catchment. The methodology used is not prescribed, but the study should honestly declare its assumptions.

In order to assist the health industry and to provide a common platform for the study of healthcare demand, the DHA may occasionally provide service planning information such as extracts from the Dubai Capacity Plan etc. The use of such information is at the planners' sole risk. The DHA makes no representations in relation to the accuracy of the information or its application to the particular project.

If no particular methodology is preferred, then the following methods may be considered:

#### **Method 1- projection of past trends**

In this method a few years of historic data can be examined to establish a trend. For example if there is evidence that the demand for Maternity or Emergency beds has been growing by 3% P/A for the last 5 years and the current facilities have reached capacity, there is a possible indication of demand over the next few years. The study may start with the core services and then add all the support services which enable or enhance the core services.

A simple trend-based projection of demand has the advantage of speed and is most useful for the expansion of the existing facilities. In such facilities, if there is no intention to fundamentally reform the operations, the continuation of the trends can be intuitively judged and reasonably estimated.

However, comparison to new services or trends obtained from facilities with vastly different circumstances can sometimes be misleading. The study should then apply, as far as possible correction factors or assume certain risks and address them.



Another risk in the use of past trends is encountered when the sample is too small or too old.

As a rough guide, trends of less than 5 consecutive years or trends older than 5 years should not be used.

In circumstances where there are observed in-efficiencies in the current operation, the projection of those trends into the future would also carry the in-efficiencies forward. So, before such trends are used, the study should declare if there is any expectation or plan for efficiency gains through operational reforms. If so, the trends should be adjusted accordingly.

### **Method 2- Benchmarks**

In this method, a simple benchmarking process is used to apply the experience in one location to another, similar location. For example, a new population centre may not currently be served by healthcare facilities, requiring the patients to travel long distances. This may be compared with similar population centres which are served by a few, busy and profitable healthcare facilities. In this example a benchmark comparison is used to conclude that there is a demand for at least one new healthcare facility (of a certain size and description) within the new population centre.

### **Method 3- pure population-based demand**

This is possibly the most detailed and scientifically accurate method of demand projection.

However, it will most likely require a specialist Service Planner to prepare the study and avoid possible pitfalls.

In a pure population-based demand study the data representing the healthcare activity of a reference population with a satisfactory health care system and outcome is used as a starting point. Then the activity rates are applied to the current and project population of the study catchment to arrive at the demand. This is another form of benchmarking, but at a much more granular level. The lowest common unit of the reference data is typically Diagnosis Related Groups (DRG's) which are



then grouped together to represent Specialties. In practice, the reference data requires customisation and manipulation to correctly represent the current and future population profile of the study catchment where “Burden of Disease” may be different. Therefore, this type of study requires high levels of skill and the use of various service planning tools available to specialists. Once the activity is projected, then it can be converted into Key Planning Units or KPU’s (Beds, Operating Rooms, ICU bays, LDR rooms, Consultation rooms, ED cubicles etc. based on formulas which take into account many factors such as Average Length of Stay (ALS) and Occupancy percentage, utilisation rates etc.

### 2.4.3 Health Service Supply Assessment

As far as possible the supply of similar healthcare services within the same catchment needs to be assessed. The comparison of Supply with Demand will require the use of the same units of measurement. The choice of unit depends on the preference of the proponents and their service planning advisors, but may include categories such as:

Key Planning Units or KPU’s (Default in these Guidelines) including:

- Acute Beds
- Sameday Beds
- Operating Theatres
- Emergency Department Cubicles
- LDR Birthing Rooms
- Diagnostic facilities (MRI, CT, PET etc.)
- Consulting Rooms

Some of the above KPU’s such as Acute Beds may be further broken down into Adult vs Paediatric, Medical vs Surgical or classified by Specialties (or Service Lines).

Alternatively, the following activity-based supply measures may be used:

- Beddays
- Admissions



- Discharges
- Separations
- Episodes of Care
- Occasions of Service
- Operations P/A
- Presentations P/A
- Scans P/A

In practice, most Private (and some Public) healthcare facilities keep their activities confidential.

This can make the Supply Analysis difficult or unreliable, if there is too much reliance on such confidential information. Given the reality of the competitive market, it is often easier to obtain the KPU information from the facilities in the catchment as they are often proudly advertised or freely shared.

Alternatively, the applicants may consult the DHA healthcare mapping system available via a link on the DHA website. Furthermore, from time to time DHA may public extracts of the Emirate-wide Capacity Plan with good information on Supply, Demand and Gap by sector and by year. The DHA may also consider providing this information in a publicly available website but without any guarantee of accuracy.

Proponents are encouraged to visit the DHA website frequently and obtain the information as it becomes available.

#### **2.4.4 Permissible and Restricted Health Services**

The health services which are permissible by DHA should be verified as part of the Supply Analysis to avoid abortive work and disappointment. Even if the demand for certain services is identified, DHA may choose to regulate their provision due to operational and safety factors.

In the future, DHA may categorise the services as follows:

- Centralised Services
- Regional Services



- **Standard Services**

The above 3 categories may be allocated at a service Specialty (Service Line) and DRG level and may be included in the appendices to these Guidelines. The Feasibility Study must take these categories into account as part of the Supply Analysis and the proposed services for the given facility. The definitions of the above 3 categories are as follows:

**Centralised Services**

Central Services are generally those which involve high complexity, high risk and low volume service. These are best provided by a few centrally located facilities which are carefully selected, checked and monitored. The centralised provision of these services is intended to ensure the minimum safe volume which in turn attracts the best specialised clinical talent and maintains the level of skill required. Such restricted Centralised services are defined by the health authorities by service specialty or DRGs (Diagnosis Related Groups). Centralised services are generally subsidised by governments.

Allocation of centralised services to specific facilities will ensure that concentration of clinical experience can lead to improved clinical outcomes for patients, and a more efficient use of resources. Quality, access and cost outcomes are reviewed regularly and Provider designation updated in light of these reviews.

Occasionally, the DHA may advertise such centralised services and seek applicants for their provision. These services may be provided in dedicated facilities which are granted the title of “Centre of Excellence” (COE). Services which are regarded as Centre of Excellent must be at the Role Delineation Levels 5 or 6 (refer to the Role Delineation Framework provided as an appendix to Part A the RDL Guide in Part B). The selected Centralized facilities (and COE’s) may be a combination of Public and Private health facilities of the highest quality.

The following table provides a guide to the Centralised Services:





Description	Examples	Providers
Highly specialised	Burns Care	Public Hospitals
Strong volume-based competency	Open Heart Surgery	Selected Private Hospitals
Low volume	Oncology Surgery	
High cost	Transplants	

### **Regional Services**

DHA may designate a limited number of “Regional” services, each serving a population of equal or greater than 250,000 residents (or other number as may be determined from time to time). These services may be provided by regional facilities subject to DHA approval.

The following table provides a guide to the Regional Services;

Description	Examples	Providers
Moderate complexity	Cardiac catheterisation	Public and Private
Time dependency	Specialist diabetes care	
Some volume-based competency		
Middle volume		
Middle cost		

Important note: It is recognised that applicants may not be aware of the Regional Services which are already allocated to other providers or applicants. Therefore, the best course of action before proposing such Regional Services is to contact the DHA, describe the intended catchment area and find out if there are any restrictions on the proposed services in that Region.

### **Standard Services**

Other services for smaller population catchments, relatively low complexity and high volume may be provided by any licensed facility with an approved operator which complies with the requirements of these Guidelines.

The following table provides a guide to the Standard Services;



Description	Examples	Providers
Non-complex	Basic diabetes care	Open market
High volume	Family medicine	
Low cost	Preventive services	

**2.4.5 Identified Health Service Gap**

To put it simply, the Health Service Gap equals Demand minus Supply. This can be analysed for the current date as well as selected future dates (typically 5 year intervals).

In practice Service Gap is also affected by any planned healthcare reform which may interrupt the normal patterns of activity. For example, it may be reasonable to assume the gap will be smaller if a healthcare reform:

- Reduces the average length of stay over time
- Increases the occupancy level to the maximum recommended level (e.g. 85%)
- Reduces the need for hospital-based beds through the introduction of programs such as home-care, outreach, community care, ambulatory care, etc.

**2.5 Competitive Landscape**

No healthcare facility or service operates in isolation. The proponents for healthcare services should assume that at any given time, many other groups may be planning for the same identified service gap. This may be easier for the owners and operators of existing facilities than the proponents of entirely new facilities. It is also not unknown that as soon as there is preliminary news regarding a new facility, others will also take note and adopt defensive strategies, such as boosting service and upgrading their facilities in order to retain both their patients and the clinicians.

The competitive landscape is not only a concern for the private healthcare providers. In a marketplace strongly influenced by private insurance, public healthcare facilities may also be required to compete for patients and clinicians. One typical manifestation of this type of competition is where public facilities lose the relatively low risk, routine, standardised and day-only treatments to the private sector.



All of the above factors should be considered and the proponents should satisfy themselves that the development is not overly sensitive to the competitive landscape.

Then any issues which arise from the above considerations should be recorded and strategies developed for market positioning, market differentiation, speed to market or synergies through associations, networking alliances and an established referral base.

The deliverable of Part F only requires a summary of the considerations rather than an exhaustive and detailed analysis. The proponents should indicate an understanding of the issues rather than try to convince a third party.

## 2.6 Proposed Services and Facilities

Considering the Identified Service Gap and the issues covered under the Investment Objectives and the Competitive Landscape, the study can then propose a range of viable services and facilities. The choices depend on the organisations priorities and preferences; however a methodical thought process and logical reasoning will be expected.

### 2.6.1 Private

In the case of Private facilities the reasoning may be as simple as choices which have the best chance of financial return or improved market share. Private Healthcare operators are not obliged to cover all specialties or the whole of the population catchment. Effectively they can choose what they wish to offer as long as the proposed services are competently and safely delivered and approved by the DHA.

### 2.6.2 Public

In the case of the Public health sector, profit is not expected to be the driving force behind decisions and priorities, although the allocated annual budget still needs to be met. Instead the logical reasoning should focus on the achievement of the greatest benefit for the population catchment in line with the long and short term health authority policies for the given area.



### 2.6.3 Restricted Services

As previously explained, Private and public operators are advised to contact the DHA to enquire about the services which may be restricted to a few centralised facilities (or COE's). Such services are typically those which require extensive resources and skills but involve relatively small number of patients. Such services are best provided from one or more central locations to maintain a minimum patient volume that justifies the provision of resources and maintains a concentration of specialised clinical skills. This in-turn will make the delivery of these services safer for the patients. Restricted services may be centralised or regional. From time to time DHA may inform the industry of the service specialties at DRG level which may be restricted.

### 2.6.4 Minimum Requirements

Ideally, for large and complex proposals, a dedicated Clinical Services Plan (CSP) should be commissioned and attached to the Feasibility Plan. However, the submission of an external CSP is not mandatory. In any event, the description of the Services and Facilities should be focussed on “What” needs to be provided rather than “How” it may be provided.

The minimum requirement of these Guidelines is to clearly state the proposed services and facilities. This can be presented in the form of a table of KPU's stating the delivery year(s) and a brief description of each service, facility or improvement. The pro-forma for this table is available under Part A- Appendix 15 – Pro-forma for the proposed Clinical Services.

## 2.7 Options Generation

The purpose of Options Generation is to explore different ways of achieving the “Proposed Services and Facilities”.

Feasibility Studies for private facilities and services must include at least one option with a clear, brief and understandable description. Since these Guidelines (Part F) are part of the overall DHA Health Facility Guidelines, it is expected that most of the details of the proposal are already covered



under the guideline requirements. Therefore, they should not be repeated here. The additional details which are developed from meeting these requirements are:

- Project synopsis
- Drawings (either Schematic or Detailed)
- Schedules of Accommodation
- Various attachments and reports

Ideally, the private healthcare proponents should consider more than one option before selecting one (see the next section).

In the case of Public Health sector, the generation of multiple options is mandatory in order to demonstrate that the best solution is identified in the public interest. In this context, the options for public healthcare facilities should follow these guidelines:

- The options should be sufficiently clear to permit easy evaluation or short-listing
- None of the obvious options should be missed or dismissed
- In the case of the upgrading of existing facilities and services, Option 1 must always be: “Do Nothing – keep safe and operating”, even if, in the opinion of the project stakeholders, it is unrealistic and unwise. This option will be seen as the base-case.
- When possible, options for the refurbishment of existing facilities should be contrasted against options for new facilities
- As far as possible lower cost options should be contrasted against higher cost options
- Options which immediately show greater potential may be detailed to a greater degree
- After a preliminary review of the options with the project stakeholders, a smaller number of options may be shortlisted for costing and evaluation. The minimum number of options for public healthcare facilities is 4 including the base case “Do Nothing”.

## 2.8 Project Costing



Each of the options generated and shortlisted should be costed. The minimum number of options for Private healthcare is 1. The minimum number of options for the Public healthcare is 4. There are several aspects to costing and each should be covered separately:

### 2.8.1 Capital Cost

Capital Cost represents the total cost of construction including all necessary fees and charges to completion, but not the cost of borrowing, leasing or land. Capital costing for the purpose of compliance with these Guidelines must comply with Appendix 1- Capital Costing Guidelines.

The Capital Costs may be estimated and provided in a number of ways which are acceptable:

- Actual quotation from a Builder
- Estimate by a qualified Quantity Surveyor
- In-house estimate by the Facilities Management or Engineering Department

It is sufficient to present the capital costing in the same format as Appendix 1 or 2.

Alternatively attach the written and signed costing provided by the Builder, the QS or the Facilities Manager/Engineer and then only provide the Cost Summary as per Appendix 1 to this Part (F).

As a minimum, the Capital Cost should cover the following:

- Site establishment and builder's sheds
- Demolition & site work
- New construction
- Refurbishment under 3 categories (Minor Refurb. Medium Refurb and Major Refurb)
- Builders overhead and profit
- Furniture and Fittings, Fixtures and Equipment (FF&FE)
- Professional Fees including Project Management costs
- Authority Charges including application fees, utility contributions and other costs
- Escalation, if any.

The Capital cost should be based on the same project timeline included in the Feasibility Study.

The results of the Capital Costing for each option should be summarised under 4 categories defined in Appendix 1 as follows:



<b>Net Construction Cost</b>	<b>NCC</b>
<b>Gross Construction Cost</b>	<b>GCC</b>
<b>Total Project Cost</b>	<b>TPC</b>
<b>Total End Cost</b>	<b>TEC</b>

For a better understanding of each of the above 4 categories, please refer to Appendix 1.

**Note: Under these Guidelines Part A Step 2, only a preliminary Cost Statement is required. This may be a statement based on benchmarks such as Cost per square meter or Cost per bed etc., since at that stage a full design may not be available. The basis and assumptions for this preliminary cost estimate should be stated. The statement should be included in the Project Synopsis as per the Self Check provided under 4.1 Executive Summary’.**

## 2.8.2 Transition Costs

Transitional costs are one-off costs which are neither part of the Capital costs (as typically quoted by builders) nor a Recurrent Cost. However, they are necessary in order to realise the proposed project. Therefore, they should be part of the budget. Transitional costs include:

### **Decanting Costs**

This involves the decanting (relocation) of existing facilities and services to an alternative location so that the current location can be refurbished, expanded, re-modelled or re-built. The cost of decanting should include the capital cost of temporary modifications, relocation costs, Additional staff costs, cleaning costs etc. It should be noted that some complex projects may require double-decanting before the normal operations are resumed.

### **Temporary Facilities**

This includes facilities which are required during the project execution within existing healthcare campuses such as temporary power generators and water tankers.



### **Recruitment Costs**

This includes the cost of hiring recruitment agents, recruitment staff, training costs and temporary accommodation costs, if any.

### **Change Management Costs**

Some large projects may require a cultural shift from the existing facilities to new facilities. This in-turn may require special provisions to re-train or coach the existing staff using specialists. It may also require one-off changes to software and business systems used, graphics, brochures, telephone numbers, email campaigns, PR, advertising etc. The study should state the transitional costs with a short description for each category of cost.

## **2.8.3 Opportunity Costs**

Opportunity costs may be positive or negative. Negative means income loss and positive means income gain. Opportunity costs include the following:

### **Income loss**

This refers to income which would normally be expected but lost due to the construction activities or the project implementation. This may be short or long term.

### **Income gain**

This may include sale of land, buildings, second hand equipment etc.

### **Recurrent Costs**

Recurrent Cost is also referred to as Running Cost or Operational Cost. It should be prepared in accordance with the categories indicated in this section.

Recurrent Costs should be shown under 2 major categories, HR and G&S Costs as follows:





## **HR Costs**

Human Resource (HR) cost is also referred to as Employment Cost, Workforce Cost or Staff Cost.

Initially the HR numbers should be estimated with a minimum level of detailed breakdown as follows:

- Doctors
- Nurses
- Clinical Support/ Para-medical
- Hotel Services
- Site Services
- Administration and Clerical

Under each category the HR numbers should be expressed as Full Time Equivalentents (FTE's). A full time employee is regarded as 1 FTE. An employee of the owner/operator who is assigned to the given healthcare facility 50% of the time is regarded as 0.5 FTE. The purpose of calculating HR via the FTE unit is to avoid double counting.

The FTE's are not confined to staff present at a given time. They include all staff numbers including all shifts in a 24 hour period. They also include staff employed but not present due to leave, training and relief. In short the total FTE represents the full time equivalent staff that need to be employed and paid in order to run the facility regardless of whether or not they are actually present on the premises at a given time.

As a minimum the HR FTE's should be stated for the present condition (if any) and the first year of operation for the project components (which are the subject the Feasibility Study). For complex multi-stage projects, FTE's should be provided for each year when a major new component of the project is commissioned.

In some of those years, partial opening of certain components may be intended. If so, the percentage completion or occupancy percentage should be stated, then the FTE's should be adjusted to represent the required HR for that level of partial opening.



HR costing involves applying an average annual salary rate to each of the employment categories above. The additional on-costs or staff benefits such as training costs, relief, holidays, insurance contribution etc. may be added to the salary rates or added at the end of the calculations. The HR costs should then be simply summarised for each employment category and totalled.

### **G&S Costs**

Goods and Services costs (G&S) represent the balance of the recurrent costs other than HR costs.

G&S costs should be provided in summary form with a minimum breakdown as follows:

- Administration
- Domestic Supplies and Services
- Drugs
- Equipment Leasing
- Food Supplies
- Medical & Surgical Supplies
- Motor Vehicle Expenses / Travel
- Other Goods and Services
- Patient Transport (including ambulance)
- Rental Accommodation
- Repairs Maintenance and Renewals
- Support & Special Services
- Utilities
- Insurance and Legal Costs
- Other

As a minimum the G&S should be stated for the present condition (if any) and the first year of operation. For complex multi-stage projects, G&S should be provided for each year when a major new component of the project is commissioned.

Note: Healthcare facilities typically involve a cycle of renewals which may involve internal or external painting, replacement of equipment, major repairs, and change of carpet or vinyl. The typical cycle is around 7 years. The G&S estimates should include a portion of the budget set aside for these under the category of “Repairs, Maintenance, and Renewals”. This effectively means that the funds are set



aside (or accounted) every year until they are needed in year 7. The allocation of a budget for such periodical renewals is necessary for the safe and sustainable delivery of healthcare services.

#### **2.8.4 Total Recurrent Costs**

The HR costs and G&S costs should be totalled for each year of the study. As a minimum this should include the present year (if facilities exist) and the first year of full operation after the completion of the project.

#### **2.8.5 Life Cycle Cost**

Should the client or the DHA as the operator of public hospitals require it explicitly in writing, provide a full Life Cycle Cost. This will involve all the recurrent costs including HR and G&S stated for the present year (if any) as well as a minimum of 10 years into the future from the date of project completion.

The annual costs should also incorporate the periodical renewals (typically every 7 years).

Then the Net Present Value (NPV) for this period should be calculated for each option and presented as a summary.

## **2.9 Revenue and Profitability**

### **2.9.1 Revenue**

In order to evaluate the feasibility of the proposed project (and its options), the proponents should calculate the expected revenue.

The revenue may be a combination of:

- Insurance payments
- Direct patient payments
- Tenancy leases
- Charity grants
- Government funding (in the case of public facilities)

The proponents should estimate the revenue whilst stating their own assumptions.



The methodologies used for revenue calculation vary considerably but may include;

- Direct calculations based on the expected throughput and rates of payment
- Benchmark against other existing operations
- Project the past revenue into the future and update for any increased volume

### 2.9.2 Profitability

It is not mandatory for private or public healthcare facilities to be profitable or cash-positive upon commencement. It is common for new facilities to require some time (2 to 4 years) to reach profitability. However, it is necessary to demonstrate a strategy to reach a break-even point over a predictable period of time. Without such a strategy, it should be assumed that the feasibility of the project has not been established or considered.

In the case of private facilities, the degree of profitability beyond the break-even point is a matter for the investors to determine, require or approve. In the case of public facilities the study must demonstrate the break-even point based on the expected or requested budget in order to allow the decision-makers to evaluate the project in an informed manner.

To summarise, it is sufficient to compare the stated costs with the expected revenue and provide a clear statement in relation to profitability or break-even timing.

## 2.10 Options Evaluation

The process of Options Evaluation is necessary in order to select one option out of many.

The minimum requirement of these Guidelines is one option for Private Facilities and 4 options for Public facilities.

Even for one option, the evaluation process should be conducted and recorded.

Based on the key elements of the feasibility study as stated above, the proponents should develop a number of evaluation criteria. These should normally focus on service improvements, value for money, patient satisfaction and long-term business sustainability.



To keep the evaluation focussed and understandable, the evaluation criteria should be grouped into 5-10 categories. The options evaluation matrix should summarise and tabulate the following:

- Short descriptions of options 1 to 4
- Summary of KPU's e.g. bed numbers, operating room numbers, etc.
- Summary of SOA or simply the Gross Floor Area
- Cost summaries including Capital Cost, Recurrent Cost, Transition Costs, Opportunity Costs, Life Cycle Costs
- Revenue and Profitability
- Short general remarks in relation to the options in the context of the Investment Objectives
- Short remarks under each of the evaluation criteria
- Short discussion of the expected risks and risk mitigation strategies

### **2.10.1 Options Selection**

The above tabulated options evaluation should follow with free-form reasoning to conclude that one option is preferred. It is not necessary for the reasoning to be convincing to all readers, but the main point is to demonstrate that there has been a thought process and the issues have been recognised and considered, rather than overlooked.

### **2.10.2 Financial Appraisal**

Should the DHA find the costs or assumptions submitted as part of the deliverables of this Part (F) unconvincing, then the proponents (public or private) may be required to subject their proposals to an independent Financial Appraisal. If requested explicitly and in writing by the DHA, a reputable Financial Consultant with experience in Healthcare should be engaged and supplied with a copy of the Feasibility Study and Costing. The Financial Consultant may then request additional information or proof of certain assumptions. Then the result of the independent review by the Financial Consultant should be submitted for a further review. In the case of public facilities DHA may choose to appoint a Financial Consultant directly without reference to the Applicant.



## 2.11 Funding Strategy

Assuming that up to this point the results of the Feasibility Study and Costing are convincing and promising, there is a need to demonstrate the capacity to fund the project.

### 2.11.1 Capacity to Fund

The capacity for funding can be demonstrated in a number of ways:

- Statement of financial capacity to fund the project directly
- Statement from a reputable Bank to indicate that the proponents have the capacity to borrow sufficient funds for the project
- Statement from investors indicating that collectively they wish to invest the necessary funds in the project
- Statement from the Financial Controller stating that funding has been set aside from the overall organisational cash reserves (or in the case of public projects) from the promised Capital funds in order to implement the project
- In the case of public projects if the funding is subject to approval after the submission of the Feasibility Study and Costing, a statement to that effect should be provided.

All the above statements should be in writing, indicating that the Author(s) have seen the Feasibility Study and Costing.

## 2.12 Procurement Strategy

The procurement strategy is a synopsis of the method of delivery intended at the time of the preparation of the Feasibility Study. The strategy may well change at a later stage and depending on commercial circumstances. However, it is important to demonstrate at least one rational and convincing procurement strategy incorporating the following:

### 2.12.1 Timeframe and Staging

Provide a simple summary of the timeframe for the project. A Gant chart is preferred with key links between the activities including:

- Project Commencement
- Completion of the Sub-structure



- Completion of the Super-structure
- Completion of internal Fitout
- Equipment commissioning
- Practical Completion
- Hand-over.

In the case of multi-stage projects where certain components are completed and occupied whilst other components are being completed, provide the above timeframe for each of the stages.

### **2.12.2 Contract Type**

Make a statement in relation to the type of contracting to be used for the execution of the project.

This may include but not be limited to:

- Open lump sum tender (or Prime Contract)
- Invited lump sum tender
- Design & Build (D&B)
- Design Develop and Construct (DD&C)
- Construction Management
- Managing Contractor (or Cost +)
- Direct Contract (or owner-build)
- Public Private Partnership (PPP)
- Turnkey
- BOOT

### **2.12.3 Governance Structure and Reporting**

Make a short statement in relation to the Governance structure to be put in place to oversee the successful, safe and competent healthcare facility. Such a governance structure may include a number of individuals, positions and reporting procedures. For example the following may be considered and included:

- Project Steering Group (SG) to meet once a month and represent the client organisation. The Steering group exclusively handles financial and budgeting issues whilst monitoring the project at a high level
- Project Control Group (PCG) to meet fortnightly to review the project & report to the SG
- Project Team Meetings to be weekly including the Project Manager, client stakeholders and the consultants. The Meetings are managed by a Client Liaison who reports to the PCG.



- Consultants Meetings to be weekly including the builder's representatives. The Consultant's report to the PCG via the Project Manager.
- Defects inspections to be carried out by consultants and "clerks of works". The results submitted to the builder and the PM concurrently
- Inspections to be attended by the relevant consultants and builder's representatives. Issues which arise to be addressed and reported to the PCG.

The Governance structure may also include the following:

- Communication Strategy- who issues public statements
- Complaint handling- who monitors complaints and ensures remedial action
- Emergency strategies- who is available to handle emergency situations such as accidents.