

Full Business Case A New District General Hospital for Dumfries and Galloway



Some financial information has been redacted pending completion of the final contract. The redacted information will be published in due course.

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A New District General Hospital for Dumfries and Galloway

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Document Change History

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3a	31/10/14	Typeface updated to Calibri throughout. Page numbering updated	СС
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4	11/11/14	Julie's comments/redrafting	СС
4	11/11/14	Susan's finance paper as at 10/11/14	СС
4	12/11/14	Added items requested by Julie e.g. Description of Options etc where new wording required	СС
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5	14/11/14	Reformatting and table updates ex Susan Update manpower ex Adrian	СС
5	17/11/14	Comments by Mike Baxter and Kerry and minor updates from Susan	СС

FOREWORD

This Full Business Case (FBC) presents the reshaping of health services through the development of a new District General Hospital for NHS Dumfries and Galloway. It follows the Outline Business Case (OBC) approved by the Scottish Government Health and Social Care Department on 5th June 2013.

The Board's ambition is to reshape the way health services are provided and the building of a new District General Hospital is a key component that must be viewed in the context of system wide changes that are being introduced.

The Board advertised the Project in the Official Journal of the European Union (OJEU) on 25th June 2013 to invite expressions of interest.

Three consortia were selected in September 2013 after successfully completing Pre-Qualification, one consortium then withdrew from the procurement process for corporate reasons on 7th November 2013.

Following a period of Competitive Dialogue, the Board received final tenders in July 2014, and the results evaluated. High Wood Health consortium were selected as the Preferred Bidder to design, build, maintain and provide 'hard' FM services to the new hospital. The Non Profit Distributing (NPD) Model (supported by the Scottish Government) is the procurement model that will deliver the Project.

The development of a new hospital for NHS Dumfries and Galloway is viewed as a real opportunity to contribute to a wider range of community benefits (e.g. employment opportunities) that will help to improve the overall health and wellbeing of the local population.

1 Executive Summary

Purpose

This Full Business Case (FBC) supports the development of a new district general hospital in Dumfries and Galloway on a site acquired by NHS Dumfries and Galloway (NHSD&G) at Garroch Farm on the outskirts of Dumfries.

The Scottish Government (SG) approved the Outline Business Case in support of the Project in June 2013 following earlier approval by the NHS D&G Board.

Cresswell and Clinical and Service Change Programme

In addition to the procurement of a new district general hospital, the Board has also spent time considering a range of other wider issues within the overall clinical and service change programme. This includes the redevelopment of the Cresswell building, greater utilisation of community and cottage hospitals, enhanced community services and the organisational development necessary to introduce the changes to clinical services to realign the way we deliver healthcare in the region.

A separate business case for the redevelopment of Cresswell and associated works is currently under development. This process was agreed with the Scottish Government, as cost certainty was not possible at this stage given the timeframe development for development of the Cresswell.

Strategic Case

The FBC further examines strategy underpinning the Project at both a national and local level. The FBC concentrates on the delivery of acute services but also focuses on the range of strategies that support the Board's aims and vision, including-

- 20/20 Vision (September 2011)
- The Healthcare Quality Strategy for NHS Scotland (May 2010)
- Reshaping Care for Older People: A Programme for Change (2011)
- Public Bodies (Joint Working) (Scotland) Act 2014
- State of NHS Scotland Assets and Facilities Report for 2012

The strategy envisages that treatments/interventions are delivered in facilities that support newer models of care designed to deliver the right care, at the right time and in appropriate locations that are closer to people's homes.

The strategy also acknowledges the demographic challenges facing NHSD&G. The region has an ageing population requiring higher levels of care because of higher levels of co-morbidity

whilst at the same time there is a reducing size of the working age population available to deliver these services. NHS Dumfries and Galloway whilst recognising the service challenges that this demographic profile creates is clear that there are many benefits to be realised by truly engaging the older population in the design and delivery of services. The increasing population of older people within Dumfries and Galloway is viewed as an asset, not a burden.

Economic Case

The Outline Business Case considered a long list of options for the reconfiguration of services.

The analysis of the options and associated sensitivities identified a new DGRI on a new site as the preferred option. This solution satisfies the project investment objectives and evidences the best overall value for money. It delivers the proposed models of care, the required capacity and an appropriate clinical environment.

The assumptions underlying the choice of preferred option were re-validated as part of the FBC and support the original evaluation outcomes.

The preferred option for the project has not changed since OBC; the development of a new district general hospital will enable the introduction of new models of care in fit for purpose facilities.

Commercial Case

Following approval of the OBC by the Scottish Government Health and Social Care Department in June 2013 the project was advertised in the Official Journal of the European Union (OJEU) to seek potential bidders for the Project.

The Project will be procured using the Non Profit Distributing (NPD) model supported by the Scottish Government (SG). The Project has an estimated capital value of £ million.

This resulted in five bidders expressing an interest in the Project. The Prequalification Questionnaire process resulted in three bidders being issued an Invitation to Participate in Dialogue in September 2013. The PQQ and the results of the evaluation and down-selection to three bidders was approved by the Project Board at that time.

After a period of Competitive Dialogue, that commenced in September 2013 through June 2014, Invitations to Submit Final Tenders were issued to the remaining two bidders (one bidder withdrew for corporate strategic reasons). A comprehensive evaluation exercise undertaken on the submitted tenders resulted in the selection of a Preferred Bidder. The NHS Dumfries and Galloway Performance Committee ratified the evaluation process and the final selection, in line with the Board's scheme of delegation.

The FBC outlines the scope of the NPD contract, including risk transferred to the private sector, based on the Scottish Futures Trust standard form Project Agreement. Hard facilities management (FM), or estates, are a part of the contract. In line with NHS Scotland policy, all other FM services will be delivered by NHS Dumfries & Galloway.

Developments since OBC

The original investment objectives based on the Dumfries and Galloway's strategic direction, reflect the consultation on the provision of acute services to Dumfries and Galloway.

Financial Case

The Board has a strong commitment to supporting the development of a new Acute Hospital for the population of Dumfries and Galloway and has support from both the Scottish Government and community planning partners including the Local Authority.

The costs presented as part of the OBC have been updated to reflect the costs included within the final tender document and the revised service models.

An annual service payment (ASP) known as the unitary charge will be paid for the provision of the facilities that covers the design, build, finance and maintenance of the new hospital on a monthly basis over the 25-year life of the contract. NHS Dumfries and Galloway are required to support 50% of lifecycle maintenance costs and 100% of hard facilities maintenance costs with the Scottish Government supporting all other costs including construction costs, development costs, financing costs and SPV running costs.

The final tender shows a first full year (2018/19) unitary charge of compared to the estimate at OBC of a reduction of . This rises to an estimated in the final year. NHS Dumfries and Galloway share of this is currently estimated at and respectively. The maintenance elements (lifecycle and facilities management costs) as well as the SPVs operational running costs are increased annually based on the Retail Price Index (RPI) with the balance of the charge remains flat throughout the duration.

The OBC identified an increase in costs of feet m, of which the Board was required to support £6.6m. To provide a level of contingency the financial plan includes a provision of £7.8m. To date £5.8m has been released and the balance is planned to be delivered in advance of opening the new facility.

The updated costs now indicate an increase of £ m, a reduction of £1.79m from OBC estimates. The table below highlights that the Board will have to build in a further £0.415m to support the increased costs whereas a saving against OBC is expected for SGHSCD.

REVISED COSTS	Existing	Revised	Movement
	£'000	£'000	£'000
Unitary Charge			
Depreciation	2,115	7,414	5,299
Service Running Costs	19,102	21,213	2,111
Facilities Management	6,989	6,564	(425)
Building Running Costs	3,177	4,559	1,382
Other Costs	0	107	107

NHS D&G £'000	SGHSCD £'000
2 000	2 000
2,499	2,800
2,111	0
(425)	0
1,382	0
107	0

OBC	30,100	63,719	33,619
Difference	1,283	(507)	(1,790)

6,660	26,959
1,555	(3,345)

The total estimated capital requirement identified as part of the OBC was £53m (excluding Optimism Bias); this has been updated to reflect any known changes to price, timing and the impact of inflation. The following table sets out at a high level the movement against the OBC Estimate.

CAPITAL COSTS	OBC	REVISED	
£'000's	ESTIMATE	ESTIMATE	MOVEMENT
Non NPD Costs	33,226	40,118	6,893
Cresswell	12,695	13,989	1,294
Existing Site Costs	7,098	7,604	506
	53,019	61,711	8,692

Inflation	Price	Timing
494	6,272	127
1,374	0	(80)
752	(284)	37
2,620	5,988	84

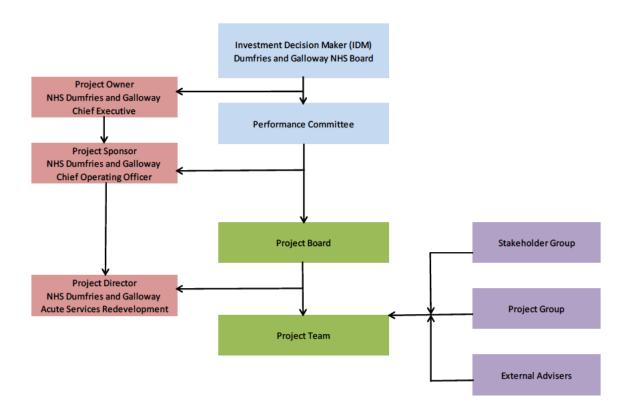
The financial case presents an affordable model for NHS Dumfries and Galloway however, given the significant financial implications of this service change considerable financial rigour will need to be maintained to ensure the level of review and challenge continues to close the recurring revenue gap. The financial consequences will be managed as part of the Boards financial plan.

The Scottish Government have already identified a share of the NPD revenue budget to support the new build project. The challenge for NHS Dumfries and Galloway will be to continue to ensure value for money is delivered through the funding competition. In addition, Scottish Government has confirmed their commitment to support the increased non-NPD capital costs and the revised capital expenditure profile will be reflected in the Boards LDP for 2015/16 onwards.

Management Case

The responsibility for Project Governance lies with the Acute Services Redevelopment Project Board chaired by the Chief Executive (Senior Responsible Officer) of NHS Dumfries and

Galloway. The Project Sponsor is the Chief Operating Officer supported by the Project Director. All Executive Board members are key members of the Project Board.



Conclusion and Recommendation

This Full Business Case has outlined the strong case for change and investment in healthcare facilities within Dumfries and Galloway. It has also shown a solution that provides all of the benefits identified at a value for money price.

The affordability and financial consequences of the investment will be managed as part of the overall financial and capital planning process undertaken by the Board.

The Full Business Case is recommended for approval.

Structure of the Full Business Case Document

This Full business Case follows the 'Five Case Model' recommended in current Scottish Investment Manual Guidance. Each section is prefaced with an outline of the purpose of the section and a high-level summary of the content.

Further information

Further information can be obtained from

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THE STRATEGIC CASE

2 Profile of NHS Dumfries & Galloway

Purpose

The purpose of this section is to provide a description of region in terms of geography and demographics and the particular challenges facing NHS Dumfries & Galloway. It will highlight significant changes since the OBC.

Summary

There has been no significant change to the demography or the range of services since the OBC was approved in June 2013.

NHS D&G, in line with other Health Board areas, is facing the combined challenge of an ageing population with higher levels of morbidity resulting in increase demand on the service, while at the same time the working age population available to meet these demands is decreasing. NHS Dumfries and Galloway recognise the valuable contribution that our increased population of older people to the health and wellbeing of our population.

Overview

- 2.1 NHS Dumfries and Galloway serve a population of 150,830¹ within a large geographical area of about 2,400 square miles. Dumfries and Galloway stretches from Langholm in the east to Drummore in the west and from Kirkconnel and Carsphairn in the north down to Sandyhills on the Solway Coast.
- 2.2 Dumfries and Galloway occupies some 8% of the landmass of Scotland but has only 3% of the population. In a league of population density, of the 32 Scottish council areas (population by sq km), it ranks 27th just above the Highlands and Orkney. This presents its own challenges in delivering effective healthcare and supporting the workforce in such a sparsely populated area.

Demographics and Morbidity

2.3 The demographic trends noted in the OBC continue. There is an increasing ageing population with increasing levels of morbidity and a decreasing working age population available to meet care needs.

2.4 By 2037, the population of Dumfries & Galloway is projected to be 141,619, a decrease of 6.1 per cent compared to the population in 2012. The population of

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¹ GROS Population Projections dd 14/08/2014

Scotland is projected to increase by 8.8 per cent over the same time-period. The population decline in the Dumfries and Galloway region results from the outward migration of working age people, compared to the inward migration across Scotland as a whole.

- 2.5 The overall population decrease obscures changes in the underlying age profiles. Over the next 25 years, the 75+ age group in Dumfries & Galloway is projected to increase most. This is the same as for Scotland as a whole.
- 2.6 Demographic projections show that the over 75 population in Dumfries & Galloway is likely to grow by 75% to over 27,000 by 2037. This rise in older age groups has considerable importance when planning future health services because these groups tend to be the greatest users of health services and have a greater level of co-morbidity than the wider population. "The impact on longevity and co-morbidity is starkly illustrated by the fact that older people now occupy the majority of hospital beds. On average in a hospital with 500 beds, 330 are occupied by older people, of whom 220 will have a co-morbid mental health problem and over 100 will have dementia".²
- 2.7 Over the same time frame the number of working age persons (16yrs to 65 yrs) is expected to decrease by some 20,740 (23%) to a total of 71,135. This forecast is particularly acute in the 50 64 age group where the trend is towards a 30% drop. NHS Dumfries and Galloway is a major employer within the region and compete with other organisations to secure continuity and appropriate staffing levels.
- The Integration of Health and Social Care across Dumfries and Galloway is focused on ensuring that the increasing older population is viewed as an asset, not a burden. We know that our older population contributes significantly to our health and social care economy in terms of unpaid caring and support. In terms of delivering a new Acute hospital, NHS Dumfries and Galloway proposes to significantly embrace the role of volunteers (the majority of who are older people) within the new District General Hospital. This will both assist NHS Dumfries and Galloway in delivering in services but will also contribute to health and wellbeing of the population and contribute to delivering the operational plan.

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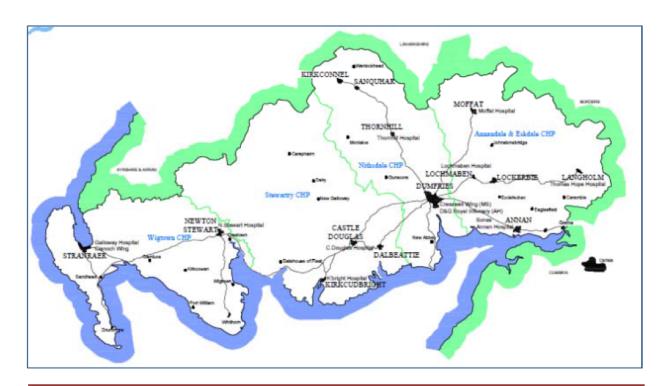
² Health Service Journal *Integrating care for people with co morbidities* 9 July, 2013 | By Martin McShane, Edward Mitchell

Health Services in the Region

- 2.9 Dumfries and Galloway Royal Infirmary is based in Dumfries and is the main hospital for the region providing a wide range of district general hospital specialities including inpatient, outpatient and women and children's health services.
- 2.10 The Galloway Community Hospital serves Stranraer and the west of the region and provides maternity services as well as medical and surgical beds. Additionally there are hospital beds, under the control of local GPs, within eight cottage hospitals providing a range of care services, including rehabilitation and palliative care. Midpark Hospital, in Dumfries, provides a regional inpatient facility for patients with mental health needs.

A consultant liaison psychiatrist is now in post and has an identified office space within the Emergency Care Centre.

2.11 The Health Board employs around 4,500 staff excluding GPs and Dentists.



NHS Dumfries & Galloway – purpose, commitment and values

2.12 NHS Dumfries and Galloway's stated purpose is to deliver excellent care that is person-centred, safe, effective, efficient and reliable, and reduces health inequalities across the region.

- 2.13 In order to achieve this purpose our actions will:
 - Reflect learning from patient experience in order to ensure a person-centred focus is maintained.
 - Improve staff experience; and health and wellbeing of staff.
 - Deliver continuous quality improvement and sustainability through services that are effective and efficient.
 - Ensure all children have the best possible start in life through a variety of interventions, sometimes targeted at vulnerable groups.
 - Enable and assist the local population to have more control of their health and wellbeing.

The Development – in this context

- 2.14 NHS Dumfries & Galloway faces significant challenges in geography, demography and morbidity. New models of healthcare are required to address these challenges but their introduction is being hampered by inadequate facilities. A new district general hospital is one part of the solution in the journey to address the challenges to provide safe, effective and quality clinical care.
- 2.15 Reviewing the way we deliver clinical services is constantly subject to reassessment and improvement. This recognises the introduction of new methods of treatment, especially drugs, but also the impact that new technology can have in the delivery of healthcare. The case for change however, goes beyond the need to respond to new drug regimes or new treatment techniques. It must go to the heart of the population change and the change in the types of care that people will need in the future. It is therefore not appropriate to develop services in a piece meal or incremental fashion but to look at clinical services as a whole and set out a clear strategy for the future.
- 2.16 Individuals are more likely to have a long-term condition and the NHS must change the focus of services from episodic care delivered in acute district general hospitals to one of co-ordinated care for people with long-term conditions. This involves a move towards integrated care pathways between primary, community and acute care that maximises support for self-care and self-management whilst developing anticipatory care approaches to prevention and management of these long-term conditions. This requires a shift from acute district general hospital care to a greater emphasis on primary and community care.

- 2.17 In addition to acknowledging this shift from episodic care to long term care, it is also important to recognise that those who require inpatient care should receive the best care possible in the most appropriate environment.
- 2.18 This requires both improved acute hospital facilities and a network of intermediate care facilities (Community and Cottage Hospitals) throughout Dumfries & Galloway that will support local care. These intermediate care facilities will provide a base for integrated community care teams who will deliver a range of care and support to individuals in their own home and in their own community.
- 2.19 The development of a new District General Hospital will enable the Board to implement a number of new models of care for adult acute emergency care and ambulatory care / 23-hour care. As part of wider system change, it will also support the shifting of care from acute into community and primary care settings with particular focus on improving care for older people. These wider system changes are being progressed by the Board via the Clinical and Service Change Programme
- 2.20 The new District General Hospital will also support more efficient and sustainable models of care in Theatres, Wards, and Critical Care.

3 Strategic context

Purpose

The purpose of this section is to update the Strategic Context underlying the proposed project from that set out in the Outline Business Case. It considers the national priorities for health and addresses the local imperatives and the particular challenges facing NHS Dumfries & Galloway.

Summary

The introduction of the Public Bodies (Joint Working) Scottish Act 2014 is a key national and local driver which has been introduced since the OBC was approved in 2013.

NHS D&G, in line with other Health Board areas, is facing the combined challenge of an ageing population with higher levels of morbidity resulting in increased demand on the service while at the same time the working age population available to meet these demands is decreasing. The Board is proposing new ways of working and new models of care to rise to these challenges. The work of NHS Dumfries and Galloway and its parties to deliver the Integration of Health and Social Care is a key enabler in this ambition to deliver new models of care.

Overview

- 3.1 The NHS Scotland Quality Strategy makes a specific reference to the need to respect individual needs and values and to provide services that demonstrate compassion, continuity, and clear communication and shared decision-making. Furthermore, it stresses that there be no avoidable injury or harm to people from healthcare they receive, and an appropriate, clean and safe environment will be provided for the delivery of healthcare services at all times.
- 3.2 Additionally the Quality Strategy emphasises that the most appropriate treatments, interventions, support and services will be provided at the right time to everyone who will benefit, and wasteful or harmful variation will be eradicated.
- 3.3 There are profound pressures within the healthcare system in Dumfries and Galloway, which together provide an overwhelming case for change. Not all of these pressures are unique to Dumfries and Galloway, in summary the immediate pressures centre on:-

- The need to be able to respond to National Policy such as 20/20 vision, the Quality Strategy and Integration of the Health and Social Care agenda and to facilitate the delivery of local initiatives such as Putting You First.
- The need to be able to respond to and manage future demographic change. The demographic change affects both the ageing population, their health needs and the workforce for the future.
- The need to further modernise services, focusing on quality and clinical effectiveness.
- The need to address backlog maintenance and the lack of functional suitability of current DGRI facilities and to improve the patient environment.

National Context

- 3.4 The national context for the development of health services in Scotland is set out in a range of policy initiatives, the most relevant of which are:
 - 20/20 Vision (September 2011)
 - The Healthcare Quality Strategy for NHS Scotland (May 2010)
 - Reshaping Care for Older People: A Programme for Change (2011)
 - Public Bodies (Joint Working) (Scotland) Act 2014
 - State of NHS Scotland Assets and Facilities Report for 2012
- 3.5 The most recent change relates to the integration of health and social care functions required by the Public Bodies (Joint Working) (Scotland) Act 2014. The Act requires Health Board and Local Authority partners to enter into arrangements (the integration scheme) to delegate functions and appropriate resources to ensure the effective delivery of those functions. The Act provides for national outcomes for health and wellbeing, to be prescribed by the Scottish Ministers, the delivery of which Health Boards and Local Authorities will be accountable.
- 3.6 NHS Dumfries and Galloway and Dumfries and Galloway Council have agreed to introduce a body corporate model to support integration. The Chief Operating Officer will also assume the role and of Chief Officer for Integration.
- 3.7 Further details of each of these is provided in Appendix 1.

Local Context

3.8 The local context for the development of services within NHS Dumfries and Galloway both responds to the national drivers set out above and reflects other

strategies that support the proposals set out within the OBC. The local context is centred on the following strategic areas, each of which is described in more detail below.

- Putting You First
- Financial Context
- The Board's Property and Asset Management Strategy
- The Board's e-Health Strategy
- 3.9 The government's vision for the integration of health and social care is to address the variability of health and social care outcomes across Scotland. The vision includes making it easier for people to remain in their own homes rather than being admitted to hospital and to facilitate more timely discharge from hospital and back to a more homely setting.
- 3.10 The vision will be achieved by promoting joint accountability across health and social care organisations and partnerships and through initiatives such as embedding GPs, other clinicians and care professionals in the process of service planning, investment and provision.
- 3.11 The **Putting You First (PYF)** programme is a partnership between NHS Dumfries & Galloway, Dumfries and Galloway Council, Third and Independent Sectors in response to the Scottish Government's 'Reshaping Care for Older People' agenda. The programme has focused on implementing test of change in the delivery of care and services to older people and carers in the region. The programme was governed by central workstreams based on the approaches of
 - Supporting People in their Communities
 - Preventative Approaches to Care
 - Seamless Pathways of Care
 - Delivering Innovative and Modern Services (DIMS)
 - Supporting Carers
- 3.12 Governance has now moved to a region-wide locality based model more in-line with the forthcoming Health and Social Integration agenda.
- 3.13 The funding for PYF ends 31st March 2015 with the vast majority of the tests ending then. The focus for the programme over the next 5 months is therefore going to be on evaluation of the 70+ tests carried out and on capturing the learning from across the region for localities to adopt where required.
- 3.14 The Health Board's **Financial Strategy** supports the affordability of the FBC for the reprovision of the Acute Care across NHS Dumfries and Galloway. The

strategy provides the robust financial context for the Board to progress with this ambitious capital development. The benefits realisation from the investment will focus on the delivery of efficient, sustainable and innovative services able to meet the twin challenges of demography and financial austerity.

- 3.15 The additional investment in services will allow the Board to implement improved management of emergency activity and patient flows. This results in a reduced requirement for general inpatient beds (arising through a reduction in avoidable admissions, reduced bed days and improvements in length of stay) and improved utilisation of Cottage Hospitals allowing existing resources to be redistributed and / or used more effectively.
- 3.16 The Financial Case captures overall financial implications of the proposals.
- 3.17 The Board's strategic estate priorities are set out within its **Property and Asset**Management Strategy (PAMS).
- 3.18 The Board's ambitious programme of service change and modernisation requires:
 - Investing in current buildings that have a role to play in delivering the new models of care so that they effectively and efficiently support service delivery.
 - Investing in new buildings to enable and facilitate the new models of care and service delivery to be fully implemented.
 - Disposing of buildings that are no longer fit for health care purposes and are deemed surplus to requirements.
- 3.19 A new District General Hospital would allow many of the property strategy ambitions to be realised. Acute services would be provided in modern, fit for purpose facilities which, when taken with changes in the use of other hospital and community services, would fully support the proposed models of care. Furthermore, it would address the significant, and increasing, backlog maintenance liability. The Property and Asset Strategy 2012 2022 identified backlog maintenance of some £58 million, of which £41m related to the existing acute hospital in Dumfries. The 2014 update of the Property and Asset Strategy indicated the backlog works for D&GRI remained at £41m.
- 3.20 The **E-Health strategy** will deliver increased productivity by clinical staff, improved safety, better management information and a reduction in the need for medical record storage facilities. It is anticipated that key benefits will arise through faster access to relevant information (allowing for improved patient safety and more timely delivery of care) as well as increasing flexibility in the way the Board utilises its workforce.

Conclusion

- 3.21 Within the case for change, there is a requirement to address both the national policy drivers and the local initiatives combined with a changing demography, a changing disease profile and a planned change to the models of care.
- 3.22 This FBC has reaffirmed the strong clinical ad service case for change and for the transformational investment in healthcare facilities within Dumfries & Galloway. The investment will act as a catalyst for the delivery of fundamental improvements in the way that healthcare is delivered in the region and this will bring major benefits to a population with significant demographic and geographic challenges.

4 Business Case Objectives and Scope

Purpose

The purpose of this section is to summarise the case for change and the associated key investment objectives.

Summary

There has been no significant change since the OBC was approved in June 2013.

The scope remains the replacement of the existing general hospital with a new development that better supports the new models of care being implemented to improve the already high levels of healthcare in Dumfries and Galloway.

Key Investment Objectives

4.1 The investment objectives originally identified in the OBC are reaffirmed and further developed for the FBC.

Ref	Key Investment Objectives identified in OBC	Further developed by FBC process	
1	Clinical Effectiveness and Sustainability: to ensure the Board provides services that are clinically effective and sustainable over the long term e.g. 30+ years.	 To provide high quality clinical services for patients requiring care that is timely, accessible and consistently available and enables delivery of quality targets; To maximise the use and availability of technology to support the internal service model and interface with internal and external stakeholders/users; To establish services/facilities which can respond flexibly to internal and external changes; 	

Ref	Key Investment Objectives identified in OBC	Further developed by FBC process	
2	Physical Environment: to facilitate the provision of services in a high quality environment which is 'fit for purpose' for staff, patients and visitors.	Environmental Quality: To provide high quality internal & external public progression to private environments that meets the therapeutic needs and expressed expectations of patients, relatives, carers and staff. The Project will meet all relevant building standards and will provide 100% single rooms and therapeutic accommodation as specified.	
3	Capacity and Demand: to ensure the Board can respond to the demand for inpatient, day case and outpatient services now and in the future.	Strategic Fit/Sustainability: To provide a flexible, adaptable and sustainable property that can respond to the inevitable changes in future service demand.	
4	Delivering models of care in line with the developing clinical strategy: to ensure that secondary care services facilitate joint planning of the development of patient focussed services, in a primary and community setting.	To deliver closer integration of care ensuring patients see the right clinician at the right time, 24/7;	
5	Access: to maximise access to hospital services for the local population.	Access: To maximise access, when required, to inpatient and community services for the local population	
6	Performance and Efficiency: to ensure the hospital is developed in such a way as to maximise performance and improve efficiency.	To deliver closer integration of care delivery improving communication between clinical teams and reducing movement and travel distances between departments;	
		To modernise Health Services and facilities which will ensure	

Ref	Key Investment Objectives identified in OBC	Further developed by FBC process
		the most appropriate use of resources and improve the overall patient, visitor and staff experience;
		 To develop good quality, energy efficient and low carbon buildings
		Effectiveness and Efficiency: Maximise the use of all available resources – property, staff and financial to meet or exceed performance requirements and improve efficiency. To ensure that the project and service are financially sustainable;
		To provide a development that is affordable both in terms of capital and in terms of revenue.
7	Recruitment, retention of staff and students: to ensure the Board is able to recruit and retain highly skilled staff to support the delivery of high quality patient care.	Enable the recruitment and retention of high quality skilled staff to support the delivery of high quality patient care.

Summary of Existing Arrangements

- 4.2 The issues with the existing estate and DGRI in particular were fully explored in the OBC. The following represents a summary of the key issues.
- 4.3 Commissioned in 1975, DGRI was a purpose built facility on the southern side of Dumfries town centre. However, most building and engineering services are as fitted in the early 1970s and have reached the end of their useful life.
- 4.4 The most recent assessment of estate condition identifies the majority of the main DGRI site (77%) as falling into category C i.e. poor condition with evidence of major defects.

The total backlog maintenance is estimated at £41m works only cost

High	2.5
Significant	18.3
Medium	14.8
Low	5.8
Total	41.4

- 4.5 The services in the wards have reached the end of their operational life e.g. nurse call, medical gas systems, electrics, water systems etc.
- 4.6 The existing DGRI is not designed in a way that promotes energy efficiency. The building energy certificate states that the hospital has been assessed and rated as 'G', the poorest rating that results in rising energy costs.

Functional suitability, quality of the environment and space utilisation

- 4.7 Since the opening of the DGRI in 1975, the range of consultant-led services provided locally has been extended and now includes services such as Oral Surgery, Renal Services and MRI services.
- 4.8 Services have been levered into the existing building in pragmatic ways that, despite best efforts, have not always offered the ideal design or clinical adjacencies to undertake clinical practice.
- 4.9 Service development has also affected the use of accommodation. Some services have substantially outstripped the space available leaving them to work in cramped conditions whilst changes in clinical practice have also rendered some working spaces functionally unsuitable.

Fragmentation of services

- 4.10 Service provision for many specialties is fragmented and split between two or more locations within the hospital.
- 4.11 In addition to departments outgrowing their existing / available accommodation, clinical services have developed, and the most appropriate models of care have changed significantly. Clinical adjacencies are poor in many areas.

Appropriate room sizes

- 4.12 A significant proportion of the current estate does not meet minimum Health Building Note (HBN) guidance for recommended minimum room sizes. In some areas, clinical services are provided in cramped conditions.
- 4.13 The wards were built to space standards existing in the 1970's and so no longer meet current space requirements. There is insufficient space for lifting aids in bedrooms or bathrooms, single rooms are inadequate and the hospital lacks isolation facilities.

Ensuite single inpatient rooms

- 4.14 The single rooms have en-suite facilities that are significantly smaller than current guidance resulting in operational difficulties.
- 4.15 The inpatient bed complement has been reconfigured/adapted over recent years. This has resulted in a reduction in the proportion of single rooms that greatly reduces bed flexibility and has an impact on the Board's ability to optimally manage outbreaks such as Norovirus.

Current Clinic Services

Emergency Care

- 4.16 Currently NHS Dumfries and Galloway emergency services (i.e. Accident and Emergency; the Medical Admissions Unit (MAU) and the Out of Hours Service operate as three separate units. The majority of GP referrals go directly to the MAU. Some patients are admitted directly to specialty areas during limited hours e.g. stroke unit is restricted to a 09:00 to 17:00 hours of service.
- 4.17 The lack of a surgical assessment unit means that surgical patients presenting in the Emergency Department experience a different pathway and this can result in significant delays.
- 4.18 Throughput and length of stay within MAU is variable and the layout of the unit and the lack of single rooms does not lend itself to person centred care, particularly at periods of peak activity.

Older Peoples Services

- 4.19 We recognise the pressures that will be created from a rising number of older patients who will have co-morbidities. The Board in partnership with Social Services is developing rapid response services to maintain older patients at home whenever possible. When admission is required, our aim is to minimise the length of stay as this leads to less functional decline in older patients.
- 4.20 Older people are often admitted to hospital due to lack of adequate alternative services in the community. Dumfries and Galloway is developing an Intermediate Care model that both supports the reduction of avoidable admissions and facilitates timely discharge from acute settings. The development of multi-disciplinary and multi-agency teams across primary and secondary care, working together to bridge the gap, will ensure that the patient's journey is safe and effective.
- 4.21 Projections predict a significant increase in the proportion of older adults suffering from dementia. Older people with dementia have more functional decline, increased admission to care homes and higher mortality rates. It is also recognised that older people with significant physical disease are at greater risk of co-existent psychiatric morbidity.

Theatres

- 4.22 During the planning for Theatres / Endoscopy / Day Surgery / 23-Hour Care services a wide range of factors were identified that impact on future requirements. These include but are not restricted to:
 - The impact of the Bowel Screening Programme increasing demand for colonoscopy
 - The impact of Joint Advisory Group recommendations regarding endoscopy
 - Decontamination Guidelines need for improved decontamination areas
 - Changes to waiting time regimes/targets
 - Increasing day case and 23 hour care activity
 - Changes/developments in technology and clinical practice e.g. increased interventional radiology in the management of vascular disease
 - Further development of Enhanced Recovery processes after surgery
 - Strategic reviews of a number of services on a supra-regional basis, most notably vascular surgery
 - Repatriation of activity from other hospitals e.g. Orthopaedic activity from the Golden Jubilee Hospital
 - CSSD remaining on the existing site

- 4.23 Services at Dumfries and Galloway Royal Infirmary are currently delivered from six locations:
 - Main Theatre (6 theatres, including emergency theatre)
 - Ophthalmology Unit (1 theatre)
 - Obstetrics Unit (2 theatres)
 - Day Surgery / Endoscopy Unit
 - Out-patients, where sigmoidoscopies are carried out
 - 23-hour care delivered from Ward 4 (previously an in-patient ward). Ambulatory care is also delivered from this ward

Critical Care

- 4.24 Three locations deliver Critical Care Services in Dumfries and Galloway Royal Infirmary:
 - Intensive Care Unit (ICU) 4 beds level 3 or 6 beds level 2
 - Surgical High Dependency Unit (SHDU) 4 beds
 - Medical High Dependency Unit (MHDU) 8 beds
- 4.25 ICU is located on the ground floor next to theatres, with MHDU and SHDU on the 2nd floor. Level 3 patients are cared for in ICU. Level 2 patients are cared for in the High Dependency Units.
- 4.26 Having three separate critical care/high dependency units within DGRI presents challenges in that it reduces nursing flexibility across these areas and is not conducive to team working.
- 4.27 Currently, Level 1 patients are nursed both in HDU and on the general wards. We will develop nursing skills and competencies across the hospital to increase the number of Level 1 patients being cared for in the general wards where appropriate.
- 4.28 The ICU (Level 3) is staffed to a minimum ratio of 1 nurse to 1 patient throughout the 24-hour period and led by Consultant Anaesthetists with intensive care skills. This is a "closed unit" model the intensive care team who are the primary care providers with some input from other specialties decide admissions to the unit.
- 4.29 The HDUs (Level 2) have a minimum of 1 nurse to 2 patients throughout the 24-hour period. Patients within HDU remain under the care of their Consultant Surgeon or Physician. The anaesthetists supported the units on an as required basis. This is an "open unit" model.

Issues associated with existing arrangements

- 4.30 Without investment in a modern, acute facility and delivering, the new models of care modernising health services in Dumfries and Galloway will not be achieved.
- 4.31 Failure to invest in a new DGH will lead to an inability to:
 - Fully and efficiently, implement the new models of care for Emergency Care, Care of Older People, Theatres, Endoscopy, and Critical Care.
 - Provide improved privacy and dignity for inpatients, and the improved management of HAI, by increasing the number of single en-suite inpatient rooms.
 - Address the current estate issues of:
 - The general poor physical condition of the building and engineering services which are at the end of their useful life
 - Fragmentation of clinical services
 - Improving the functional suitability of accommodation
 - Fully complying with the Disability Discrimination Act (DDA)
 - o Improving space utilisation
 - o Improving the quality of the physical environment
 - Providing improved and more appropriate room sizes for clinical services in line with current and pending future SHBN guidance
 - Improving energy efficiency
- 4.32 The Board's Estates Strategy has been developed to create the quality of environment and facilities required to support the Clinical Services Strategy. The Strategy identifies how the Board will use and support its existing buildings, which buildings will become obsolete and be demolished and where new buildings are required to underpin the Models of Care and Service Delivery. This objective is therefore reflected in this business case.

Project Scope - New Hospital

- 4.33 The proposed scope of services contained in this FBC is for the provision of a new District General Hospital, which by definition incorporates all of the services currently being provided in DGRI with the exception of:
 - Chronic Renal Services
 - Ophthalmology Services
 - A limited range of outpatient services

- 4.34 The services that are not provided within the new hospital will be redeveloped in Cresswell and be the subject of a separate business case.
- 4.35 A summary of the Preferred Bidder solution is at Appendix 2.

Conclusion

4.36 The foregoing paragraphs demonstrate the profound pressures facing NHS Dumfries and Galloway including the unsuitable nature of current facilities to support and enable the new models of care that are being introduced. NHS Dumfries & Galloway are facing challenging financial pressures, increased service user expectations and significant demographic pressures. These can only be addressed by the provision of a new district general hospital supported by new ways of working and significant organisational change.

5 Future Service Model

Purpose

The purpose of this section is to describe the proposed new models of care and to highlight any further developments and changes since the original investment proposal was put forward.

Summary

There has been no significant change since the OBC was approved in June 2013.

The proposed models of care and the results of the capacity modelling have been revalidated since the OBC.

Overview

5.1 The development of a new district general hospital is a component in the range of changes that need to be made to the provision of health care services in NHSD&G.

The introduction of new models of care across primary, community and acute services is an integrated part and our solution.

Proposed Model of Care

- 5.2 This FBC recognises that the debt of a new District General Hospital is a key element of delivering new models of care that help to support a shift in emphasis towards preventative, ambulatory care in the community and a focus on care of people with long term conditions. Where a hospital stay is required, it will be for a short period with a focus on returning the patient to the community setting as quickly as possible.
- 5.3 Key areas for redesign have been identified and include:
 - Emergency Care (Combined Assessment Unit, Emergency Department and Out of Hours)
 - Care of Older People
 - Theatres/ Endoscopy/ Day Surgery/ 23 Hour Care
 - Critical Care

Emergency Care

- The new hospital will create a cohesive Emergency Centre that operates as a "front and back door facility", with a focus on "decide to admit" rather than "admit to decide".
 - NHS Dumfries and Galloway have a Mental Health Crisis Intervention Team that has staff on duty over the 24-hour period. This is based in the Emergency Care Centre in the new hospital and a dedicated interview room is available for the assessment of presentations of psychiatric emergencies.
- There will be increased ambulatory care supported by senior medical review and rapid access to diagnostics. Therefore, it is anticipated that a significant percentage of presentations at the CAU will not result in the patient being admitted to the general wards.
- 5.6 The CAU will comprise 32 beds and 10 assessment trolleys. The anticipated length of stay within the unit will be less than 48 hours. The concentration of senior skilled staff in the Combined Assessment Unit will ensure early proactive management of patients that has been shown to reduce average length of stay and improve safety.
- 5.7 The close adjacency of the CAU and Emergency Department, with co-location of staff, lends itself to much more flexible team working across the Emergency Care Centre.
- 5.8 Allied Health Professionals and Social Work staff will be based in the Emergency Care Centre, to contribute to early assessment and support effective discharge planning.

Care of Older People

5.9 A number of Intermediate Care models are being implemented via the "Putting You First" programme and established work streams. The models are being developed with a focus on ensuring sustainability. An example is the 'Hub' initiative in Dumfries that provides a single point of contact to a multi-disciplinary, multi-agency team. This will reduce avoidable admissions to acute services and support earlier discharge. If, on assessment, the individual does not require acute medical care, alternative community based services will be provided.

- 5.10 The cottage hospitals within Dumfries and Galloway will provide a greater role in intermediate care. This is being achieved by enhanced medical input to the cottage hospitals, extended training for nursing staff and increased availability of AHP staff. This will increase patient flow through the generic wards in the acute hospital and deliver care within an environment that is closer to the patients' home.
- 5.11 The development and implementation of intermediate care services is key to the successful delivery of the overall model of care. Without this, we will be unable to address the challenge of increasing demands on health and social care because of changing demographics and needs.

Theatres / Endoscopy / Day Surgery / 23-Hour Care

- 5.12 Within the new hospital, all theatre services, with the exception of ophthalmology day case, will be provided from one location, thereby increasing efficiency and productivity:
 - Main Theatre (8 theatres, including emergency and obstetric theatres)
 - Endoscopy (4 suites, with endoscopy decontamination facility)
 - Day Surgery and 23-hour Unit
- 5.13 The revised Model of Care will improve all surgical and associated pathways through a re-design of processes, services, staffing and accommodation. This will be achieved with improved pre-assessment, admission on day of surgery (AODOS) for a minimum of 95% of surgical and endoscopy admissions. Our BADS (British Association of Day Surgery basket of procedures) day case rates are currently 82%, against the national BADS score of 81.5%; we will be working towards improvement to a local 90% target for **all** day cases.
- 5.14 The revised arrangement minimises duplication of effort and resources through improved physical adjacencies.
- 5.15 It will also reduce journey times within the operating department/ endoscopy/ support areas and between these and related areas including surgical wards and critical care.

Critical Care

- 5.16 The proposed Model of Care provides a co-located / combined unit with 17 beds, encompassing ICU, SHDU and MHDU resulting in increased productivity.
- 5.17 This allows considerable pooling of expertise and economies of scale whilst improving quality. This will also maximise use of a scarce workforce.
- 5.18 It provides the opportunity to implement the preferred closed model, under the management of the anaesthetists for admission and discharge. This model will be vital to ensure equitable use of beds and to provide dedicated medical staff input over the 24-hour period.
- 5.19 Improved efficiency of space is also achieved via shared support areas.

Service benefits of the new models of care

- 5.20 The anticipated benefits and service improvements arising from the proposed new models of care include:
 - Patients will be cared for in the most appropriate place, which may be their own home, by the most appropriate team;
 - Improved person-centred, quality care for all patients tailored to meet identified, individual need;
 - Integrated and adjacent services which span the patient's pathway;
 - Steps within the patient's pathway are clearly defined;
 - Increased efficiency by maximising the potential of all available resources;
 - Increased resilience to fluctuating demand in different units;
 - Improved clinical outcomes through standardisation and consistency of practice delivered by dedicated, integrated teams;
 - Older people will not be admitted to acute beds unless medically necessary as there will be greater utilisation of cottage hospitals coupled with the provision of appropriate, proactive, alternative services nearer to or in their own homes;
 - Integration of health and social care will ensure that the associated demographic needs, both from a clinical and care perspective are met within the constraints of combined budgets;
 - Reduction in the number of avoidable admissions and an overall reduction in occupied bed days.

Future Capacity Requirements

- 5.21 The development has been the subject of extensive and involved bed and capacity-modelling exercises outlined in the OBC. These take into consideration a wide range of factors related to future activity and models of care (e.g. length of stay and occupancy rates).
- 5.22 It is imperative that bed capacity is regularly reassessed to account for unpredictable change; change in future strategy and policy; gains from enhanced partnership working and from updated data and trends in bed utilisation.
- 5.23 Since the OBC, the bed modelling exercise has been reviewed in detail and remains valid.
- 5.24 Planning assumptions on e.g. lengths of stay, day case rates, occupancy levels, and theatre and outpatient utilisation have been taken into account in projecting the future capacity requirements for 2026. This year was chosen as a baseline in order to reflect the anticipated changes in demography and epidemiology. The total capacity projections are set out in the following table.

Summary of requirements by service area to 2026

Facility	Current Actual	Future Service Requirements	Actual number provided
Medical/Surgical Wards	271	214	210
Combined Assessment	0	42	42
23 Hour	0	14	14
Critical Care	18	16	17
Palliative Care	8	8	8
Children's Unit	23	24	24
Obstetrics	38	29	29
Total inpatient beds	358	347	344
Day Case Unit trolleys	14	20	20
Ambulatory Care trolleys/chairs	8	10	10
Total trolleys/chairs	22	30	30
Theatres	9	9	8 ¹
Scoping suites	3	3	4
Outpatient consulting rooms	27	33	33

¹ Excludes the Ophthalmology Theatre that will be based in Cresswell

Conclusion

5.25 This section summarises the proposed models of care and the results of the capacity modelling undertaken and revalidated since the OBC.

6 Workforce Planning

Purpose

The purpose of this section is to provide analysis of the workforce planning, including details of the approach, requirements and how the workforce change will be managed.

Summary

Work has commenced on the significant change process that is required to ensure that the workforce is of the right capacity and is appropriately skilled to meet the significant clinical and operational demands that are forthcoming.

Overview

- 6.1 This section of the FBC describes the approach taken in relation to workforce planning. Work has commenced to match workforce requirements to the new models of care.
- 6.2 The section will expand on how the new models of care will be introduced and how these changes will be adopted prior to handover and commissioning of the new hospital.
- The local demographics for Dumfries and Galloway demonstrate that by 2037 the projected population will be 141,619. This is a decrease of 6.1% on the 2012 population. The working age population (16-64) will reduce by 23% from 91,875 in 2012 to 71,135 in 2037. Both the NHS and the Local Authority, as the two largest employers in the region, will be competing for this reduced pool of potential employees.
- 6.4 The integration of Health and Social Care anticipates reduced duplication and best use of the available workforce.
- 6.5 Recruitment remains a challenge for the Board because of factors such as the demographics mentioned above, reduction in the numbers of doctors in training and competition from the Central Belt and larger Boards.
- 6.6 Workforce development will be a crucial element in delivering new models of care and ensuring a safe, skilled and effective workforce. Future focus will be on

the development of integrated team working. Work has already been undertaken to identify the learning and development needs of staff in relation to the models of care. A number of initiatives are currently being tested and trialled through our strategic change programme "Putting You First" such as the Dumfries Health and Social Care Hub. This is a multi-disciplinary/ multi-agency service with a single point of contact to streamline patient care.

Developing the workforce plan

- 6.7 The overall vision for the workforce is to ensure the right staff are available in the right place with the right skills and competences to deliver high quality care and services.
- 6.8 In order to realise this vision the workforce needs to be aligned with both service and financial plans to ensure affordability and sustainability over the long term.
- 6.9 New and emerging models of care, a greater use of telemedicine and telecare and the requirement for improvements in quality, safety, productivity and efficiency are changing the locations for care, pulling less specialist services into the community, closer to the peoples' homes and creating a greater concentration of specialist care on the acute site.
- 6.10 Workforce development will be a crucial element in delivering new models of care and ensuring a safe, skilled, effective workforce. Future focus will be on the development of integrated team working and the provision of a flexible workforce that can easily adapt to the changing environment.
- 6.11 The redesign and configuration of services emerging from this project is anticipated to provide the advantage of ensuring long-term sustainability of services provided via reviewing roles, responsibilities and skill mix. The opportunity gained by the provision of inpatient care from a purpose built hospital will be harnessed and exploited in future recruitment drives.
- 6.12 The workforce of the future, therefore, will be somewhat different from the workforce of today and NHS D&G are actively working towards securing a complementary workforce for the new hospital and supporting care in community settings via ongoing key workforce and service redesign projects, some of which are in place, whilst others are at the early stages of development. NHS D&G, fully recognises the need to work in partnership with primary care colleagues across General Practice, Community Pharmacy, General Dental

- Services and Ophthalmics to develop integrated models of care and the workforce, needed to support these services.
- 6.13 There will be the potential to further develop new multi specialty team approaches and develop advanced practice roles. These factors are expected to help make NHS Dumfries & Galloway a more desirable employment destination.

Nursing Workforce

- 6.14 Detailed workforce planning has been undertaken since OBC approval within all of the general wards, the Medical Admission Unit, the Surgical Assessment Unit (SAU) and the Emergency Department. This work is ongoing to ensure that the current and future workforce is equipped to meet the needs within the new models of care.
- 6.15 NHS Dumfries & Galloway are confident that the changes to date and the implementation of future, planned change, commensurate with patient needs, will ensure that the models of care are robustly implemented.
- 6.16 The National Workforce Planning Tools that incorporate a Professional Judgement Tool have been fully implemented. The findings were triangulated with Key Quality Indicators (e.g. complaints, patient experience, falls, and cognitive impairment) and the local context (i.e. sickness/absences/utilisation of bank staff etc).
- 6.17 In order to provide further scrutiny to the findings a number of meetings were held with individual Senior Charge Nurses to review templates and rostering arrangements and to fully understand the current activity and dependency within their wards/ departments.
- 6.18 Through this detailed work, it is apparent that activity, acuity and dependency levels do not reduce significantly during the 12-18 hour daytime period. Work has therefore begun to move away from current historical shifts to a more consistent level of staffing throughout this 12-18 hour period in the day.
- 6.19 A specific Workforce Plan is in development, which is in alignment with our NHS Board Strategic Workforce Plan. Key elements of this specific plan are as follows
 - An electronic rostering system to facilitate the effective and efficient deployment of staff is currently being rolled out.
 - Additional resource will be implemented into all generic wards to facilitate a twilight shift.

- The Nurse Bank has been reviewed and a Relief Pool has been added to ensure rapid response to short term / short notice sickness/ absence.
- Following review of the Medical Assessment Unit (MAU) additional resource has been provided to enable staff to implement new ways of working in preparation for the new Combined Assessment Unit. Rotation of staff across MAU and SAU will now commence.
- Advanced Nurse Practitioners work within Hospital @ Night. This has now been expanded into a daytime role within the general wards. Further development has placed them within the MAU. Work is currently underway to explore options of utilising ANPs to complement the Out Of Hours Service.
- The Emergency Department (ED) is currently under review by a Senior ED Consultant. The aim of which is to implement new ways of working in line with the Clinical and Service Change Programme.
- Benchmarking with regard to staffing levels within new hospitals with single room provision has taken place. This coupled with the aforementioned detailed work has secured a significant additional resource as outlined in the finance section.
- The new model of care for Critical Care will function as one integrated unit.
 Recent retirements have enabled the implementation of a single Senior Charge
 Nurse for this future combined unit. A fixed term Clinical Educator has been appointed to provide training and development for all relevant staff over the next two years and to support them through the change process.
- An options appraisal is being developed to consider a step-down facility for stroke and rehab patients at one of the nearby Cottage Hospitals. The introduction of Advanced Practice Physiotherapists is being explored.
- Organisational Development, Psychology and staff side are preparing a programme for all staff to support them through this extensive change programme.
- Resources have been released to allow these models to be implemented in advance of the new hospital development

Allied Health Professionals

6.20 Scoping work has been carried out to clarify, understand and review the current AHP resource within the Acute and Diagnostic Unit, the Cottage Hospitals and the Community. The principal aim is to identify the additional resource required to meet the need within the new models of care. This will be from a manpower and location of resource perspective.

- 6.21 This significant piece of work, mainly taken forward by the Clinical Services Change Programme, includes the following key aspects:
 - Dedicated AHP input (physiotherapy and occupational therapy in particular)
 within the new CAU
 - Alignment of the appropriate resource within 4 key Cottage Hospitals
 - The introduction of Advanced Practice particularly physiotherapy within a potential step down facility for rehabilitation and stroke patients
 - Further development of the HUB i.e. a single point of contact for referral for community services as an alternative to hospital admission
 - Potential realignment of STARS Short Term Augmented Response Service into the locality areas rather than a stand-alone central service.

This work is in the formative stages. However, it is expected that it will be completed and new models of care implemented in advance of the move to the new District General Hospital.

Medical Workforce for new hospital

- 6.22 A preliminary analysis of the medical workforce indicates further workforce planning is required in the department of medicine and in particular in relation to acute receiving.
- 6.23 Acute Receiving faces a number of challenges from a capacity and recruitment perspective. These are mirrored nationally and are not specific to this project
 - Increasing acute referrals;
 - Increasingly demanding rotas;
 - Desire/need to withdraw from "acute receiving";
 - Future retirements;
 - Smaller pool from which to recruit;
 - Reducing trainee numbers;
 - No daily availability of senior decision maker (detecting deterioration and discharge) in "downstream" wards;
 - Impact on Referral To Treat (RTT) guarantees.
- 6.24 Early analysis has indicated that the shortfall would require a number of consultant or middle grade posts to achieve the required objectives. Further development of the solution is being undertaken to address items such as rota design, weekend working, clear career development etc.

- 6.25 The following will also be undertaken as part of the review:
 - Assessment of impact on RTT and elective work
 - Evaluation of risk to education and training
 - Review Advanced Nurse Practice model (and numbers) to address the potential trainee shortfall
 - Review use and skills of specialist nurses
 - Review adequacy of medical, AHP and nursing cover for Cottage Hospitals
 - Combining three existing Critical Care Units into one combined unit requires additional Middle Grade doctor
 - Combined Assessment Unit model of care requires additional medical input, one middle grade doctor.
- 6.26 All other clinical areas are considered adequate for the future service if they are up to full complement.

Conclusion

- 6.27 Work has commenced on the significant change process that is required to ensure that the workforce is of the right capacity and is appropriately skilled to meet the significant clinical and operational demands that are forthcoming.
- 6.28 The Clinical and Service Change Programme will ensure that appropriate and necessary changes are implemented in advance of move to the new hospital.

7 Benefits, Risks, Constraints and Dependencies

Purpose

The purpose of this section is to set out the main benefits of the project and to highlight any significant risks to delivery and any constraints that could hamper delivery and dependencies.

Summary

Since the OBC, the benefits arising from the project have been further developed and will continue to be monitored and reviewed through the life of the concession. There are a number of risks that need to be closely monitored and managed particularly in the early stages of the project.

Main outcomes and benefits

- 7.1 The Benefits Realisation Plan (BRP) that was included in the OBC has been reviewed in the light of the establishment of the Clinical Service Change Programme to ensure the correct emphasis between the hospital development and the Change Programme. It is further discussed at Chapter 13
- 7.2 The high level outcomes and benefits the Project is designed to deliver remain as stated in the OBC
 - To improve Clinical Effectiveness and Sustainability;
 - To improve the Physical Environment;
 - To manage Capacity and Demand for clinical services;
 - To develop new, more appropriate, Models of Care;
 - To maximise Access opportunities for the local population;
 - To maximise Performance and improve Efficiency;
 - To enable the Recruitment and Retention of staff and students
- 7.3 Many of the issues are inter-related and inter-dependent. For example, issues with poor quality and dysfunctional estate impact on models of care, clinical quality and recruitment and retention that in turn can mean costs are higher influencing sustainability and efficiency.

Main Risks

- 7.4 The current Risk Register contains 66 active risks.
- 7.5 The continuing development of a comprehensive Risk Register is a core part of risk management activity. The purpose of a Risk Register is primarily to focus attention on the risks related to the project, to provide a method of describing and communicating the risk and to document efforts to reduce the risk
- 7.6 The process of risk management can be characterised as:
 - Identifying the risk;
 - Assessing the risk;
 - Mitigating and reporting the risk; and
 - Closing the risk.
- 7.7 Each of risks is scored (using 1 to 5 matrix) for its likelihood and severity. A single score that is calculated by multiplying the likelihood and severity ratings is established. This single score determines whether a risk is Red, Amber or Green (RAG). The table below outlines the scores and how these relate to the RAG rating of a risk.

Low	No additional risk controls required.
(score 1 – 8)	
Medium (score 9 – 14)	Further action shall be taken to reduce the risk but the cost of control should be proportionate.
High (score 15 – 19)	Further action, possibly urgent and requiring considerable resources, shall be taken to reduce the risk. Responsibility for introducing risk control measures within a set timescale shall be explicitly defined by the appropriate Director or General Manager and followed up through the performance review process.
Very High (score 20 – 25)	If confirmed to be unacceptable, the risk should be escalated immediately to Director level. An immediate action plan should be drawn up with Executive level leadership. and should be taken to the next available Board

7.8 The highest risks (risk score of 9 and above) facing the project at the time of this report are as detailed below. The full risk register is attached as appendix 11.

Risk	Countermeasures
Failure to re-locate existing foul drainage	Progression of design and detailed
system before commencement of	construction programme together with
construction of new build.	dialogue with Scottish Water all currently
	programmed to be completed before
	financial close.
	Meeting with SW on 20/6/14 - await
	outcome. Discussions with SW proved
	inconclusive and there are concerns over
	the timing and costs impact, it has been
	referred to SG for resolution.
Numbers of suitably trained / qualified,	Workforce planning undertaken,
competent staff, as determined by	integrated with service and financial
workforce plan, are not developed,	planning, ensure resource impact is
retained and or recruited to meet the	signed off agreed and incorporated into
requirements for the delivery of safe,	financial plan, develop effective staff
effective services. This includes a	training and development plan and
potential failure to recruit to senior	interventions in accordance with clinical
medical, AHP and nursing posts.	change programme requirements
	programmes and monitor progress of
	implementation and refocus where
	necessary to deliver required outcomes.
	Likelihood increased because of current
	recruitment pressures.
	The Project team will continue to engage
	with the Workforce Director to ensure
	that this risk is fully understood and
	mitigated appropriately.

Risk	Countermeasures
Failure to implement changes to patient	Implement strategy for changing clinical
pathways prior to new build being	practice to reduce inpatient bed use.
completed, leading to inadequate bed	Revised organisational structure
numbers.	initiated, workshop dates and attendees
	in diaries. Tests of changes underway e.g.
	surgical assessment unit. Further work to
	be undertaken to progress test of change
	e.g. staffing and operational community
	hospitals.
	Confirmation of original assumptions on
	which bed numbers were predicated.
	Clarity on actions to reduce length of
	stay.
	Clarity on future model for vascular
	services.
	Medical Director having discussions with
	a range of stakeholders incl GPs and
	PCCMB and engaging with Unscheduled
	Care group to follow a firmer approach to
	discharging patients
Facility Does not provide accommodation	Continue discussions with user groups.
(office) to the configuration expected by	Reaffirm Board's commitment to chosen
staff	option. Explore further options with
Stan	Preferred Bidder and provide costed
	options for consideration. Revised office
	configuration is being agreed with
	preferred bidder and designs altered
	accordingly to address staff comments on
	office accommodation.

Risk	Countermeasures
There is a risk that eCasenote has not	GM for ICT to ensure early roll out of
eliminated the need to use paper records	electronic medical records implemented
within the hospital	in existing facility. Robust testing of
	proposed system to be carried out in
	advance of migration. Regular means of
	reporting into ASRP to be continued.
	Other electronic based systems continue
	to be developed to replace the remaining
	paper-based systems. Current plans
	continue to use "slimmed down" paper
	based systems for immediate patient care
Revised Stakeholders/Board requirements result in design changes	Design Team engaged with workstreams during development of reference design. Ensure Service leads and Project Board understands implications that any service changes will have on programme and cost. Robust change control now in place. Designs signed off at PB stage and will be fine-tuned up to FC. Current indications are that some changes are being requested; these will be followed up post financial close and will require associated business cases and identification of funding.

Risk	Countermeasures
Capital cost over run on enabling works	Regular communication between all parties. Detail design developed for all aspects of enabling works. Risk transfer to partner bodies such as Local Authority and Transport Scotland to be investigated. Approved upper value as per OBC, Change Control process in place and final tenders being currently sought. Final tenders now received and being managed against for utilities, All land transactions complete. Scope change to Transport Scotland element to include IT ducting. Basis of foul design being revised owing to incomplete information from Scottish Water Horizons. Cost efficiencies in other utilities have been found.
CAU not delivering service model as detailed in clinical brief	Very senior clinical lead needs to be identified to drive agreement across specialties and to implement service changes to ensure delivery of revised service model at time of migration. Further work continues on mapping patient pathways and learning from recently completed projects elsewhere in the UK. Refer to Risks 2 &3.

Risk	Countermeasures
Not achieving 80-85% utilisation of	Develop policy for transfer to cottage
community hospitals	hospital and commence implementation
	as early as possible to ensure standard
	practice by migration time. Service
	specification in respect of GP input to
	Community Hospitals now agreed.
	Operational policy for Community
	Hospitals now approved by BMG. Clinical
	and Service Change Programme Joint
	Board now established, with action plan
	to follow.–Action Plan currently being
	developed by Primary and Community
	Care (Clinical Change) Work-stream. See
	comments on risk 2 re progress. Will be
	taken up as part of the CSCP business
	case process.

Key Project Constraints

- 7.9 The project constraints outlined at OBC remain valid
 - Project must be delivered within the available capital and revenue envelope, identified in local plans;
 - Project must be delivered within the parameters of the Funding Conditions (including the Construction Cost Cap) outlined in the OBC approval letter dated 5 June 2013;
 - Preferred Bidder solution should provide sufficient flexibility and adaptability for future changes and/or increases in service requirements.

Project Dependencies

- 7.10 The key project dependencies identified in the OBC are reaffirmed and will be carefully monitored throughout the lifetime of the Project:
 - The successful implementation of the Clinical Service Change Strategy including the redevelopment of the Cresswell Building on the existing DGRI site;
 - Increased utilisation of the cottage hospitals to release beds for acute care;
 - Planned changes to models of care including, but not limited to, theatres and emergency care, are successfully introduced;

- The availability of adequate numbers of appropriately trained medical, AHP, nursing and ancillary staff;
- Dumfries and Galloway Council granting Project Co the required planning approvals.

Conclusion

- 7.11 The expected outcomes and benefits, as well as the main risks, key project constraints and dependencies from this development have been identified, developed, agreed and confirmed during the development of this FBC.
- 7.12 Since the OBC, the benefits arising from the project have been further developed and will continue to be monitored and reviewed through the life of the concession. There are a number of risks that need to be closely monitored and managed, particularly in the early stages of the project.

THE ECONOMIC CASE

8 Economic Case

Purpose

This section of the FBC reviews the results from the detailed appraisal undertaken at OBC stage in order to determine if there are any significant changes in the key variables influencing the outcome.

- Option Appraisal: reviews key variables from the option appraisal work undertaken as part of the OBC for the detailed FBC plans;
- Financial Appraisal: reaffirms the Net Present Cost (NPC) and Equivalent Annual Cost (EAC) results from the OBC financial appraisal; and
- Preferred Option: reconfirms the preferred option outcome from the OBC.

Summary

The OBC included a robust economic option appraisal process that identified a preferred option to take forward a new build district general hospital on a Greenfield site. A review of the underlying components of the economic appraisal has not uncovered any material items that would lead to a requirement to challenge the OBC solution.

The decision has also been validated by the further work that has taken place since the OBC in developing the preferred option with bidders resulting in lower than anticipated costs and a continued focus on delivering quality benefits.

Overview

- 8.1 This section of the FBC reviews the results from the detailed appraisal undertaken at OBC stage to establish if there are any significant changes that would require a reappraisal of the options.
- The section follows the latest VFM 'Supplementary Guidance for Projects in the £2.5 billion Revenue Funded Investment Programme' issued by SFT in October 2011. This guidance follows the requirements of HM Treasury wherein VFM is defined as "the optimum available combination of whole-life costs and quality (or fitness for purpose) of the good or service to meet the users' requirements. VfM is not the choice of goods and services based on the lowest cost bid."
- 8.3 The outline business case was the culmination of a series of option appraisals and related documentation that led to the final choice of the preferred option.

Review of OBC Option Appraisal Results

- 8.4 The original option appraisal undertaken at the time of the OBC included a long list of eight options that was discounted to a short list of three options. The remaining options were evaluated and a preferred option was identified.
- 8.5 The evaluation of the short listed options to identify a preferred option was carried out by reference to three core elements
 - Economic appraisal (Net Present Value);
 - Non financial benefits;
 - Non-financial risks.
- 8.6 The purpose of the FBC is to review the core elements in relation to the preferred option to ensure that the underlying assumptions remain valid and relevant
- 8.7 The table below provides further details on the options shortlisted.

Option	Name	Description
1	Do Minimum	Addresses backlog maintenance relating to existing DGRI whilst providing additional ward accommodation. This is achieved through a combination of upgrade to the existing estate and new build. The Cresswell wing is retained in its current form.
2	New District General Hospital on current site	Provides for a new DGH on the existing hospital site utilising current car parking space. The Cresswell wing is retained but function reviewed in light of issues associated with links to the new development.
3	New District General Hospital on alternative site	Provides for a new DGH on a greenfield site within Dumfries. Cresswell wing is retained but with alternative use.

Economic Appraisal

8.8 The Net Present Value (NPV) is the measure used to compare options during the economic appraisal. NPV is a technique that expresses a range of costs of the

- project in present day prices. The cost elements that are taken into account are typically the capital costs of the project and significant elements of the revenue costs such as the unitary charge arising from project.
- 8.9 The Board will only undertake a full review of the economic appraisal in the FBC if any of the cost elements of the preferred option has increased significantly compared to the approved OBC. Guidance issued by SFT recommends that comparison of the revenue-funded option with a capital-funded alternative is not required at the FBC stage.
- 8.10 The Preferred Option identified in the OBC was used as the basis for establishing a Construction Cost Cap as a condition of the Scottish Government's revenue support for the Project.
- 8.11 The Preferred bidder submission is within the terms of the Construction Cost Cap ("the cap"). This covers the construction costs eligible for revenue funding support including the cost of the building, IT infrastructure, Group 1 (supply and installation) and Group 2 (installation only) equipment and private sector design fees post financial close. The cap was updated at Invitation to Submit Final Tender for inflation in accordance with the revenue funding conditions.
- 8.12 The preferred bidder has offered a solution that is based on a lower underlying Construction Cost Cap and consequently reduced unitary charge than was assumed within the OBC. There are no significant changes to the lifecycle or maintenance costs that require to be accounted for.
- 8.13 The economic appraisal conducted for the OBC is considered robust and provides a basis to complete the FBC.

Non-Financial Benefits

8.14 The OBC identified, in conjunction with stakeholders, a range of benefit criteria against which a preferred option would be identified.

Criteria		Map to Investment Objectives
1	Quality of Patient Care	 Clinical Effectiveness and Sustainability Physical Environment Capacity and Demand Delivering Models of Care in line with clinical strategy Access Performance and Efficiency
2	Clinical Effectiveness , Integration of Service	 Clinical Effectiveness and Sustainability Capacity and Demand Delivering Models of Care in line with clinical strategy Access Performance and Efficiency
3	Sustainability and safety of services	 Clinical Effectiveness and Sustainability Capacity and Demand
4	Appropriate Numbers of adequately trained staff	 Recruitment and retention of staff and students
5	Quality of Physical Environment	Physical EnvironmentAccess
6	Timing, phasing and disruption	Clinical Effectiveness and SustainabilityPhysical Environment

8.15 These criteria were weighted and scored by a range of stakeholders and a preferred option identified

			Weighted Score		
		Weighting			
Crite	eria	%	Option 1	Option 2	Option3
1	Quality of Patient Care	21.5	116.1	182.7	200.0
2	Clinical Effectiveness ,				
2	Integration of Service	20.5	98.4	164.0	178.3
3	Sustainability and safety of				
3	services	19.5	83.9	159.9	167.7
4	Appropriate Numbers of				
4	adequately trained staff	17.5	87.5t	148.8	148.8
5	Quality of Physical Environment	14.0	57.4	126.0	128.8
6	Timing, phasing and disruption	7.0	19.6	35.0	66.5
	Total Score	100.0	462.9	816.4	890.1
	Rank		3	2	1

8.16 The non-financial benefits have been reviewed by the Project Team and are confirmed as still being valid and in line with the NHS Scotland Quality Strategy.

8.17 The appraisal for qualitative benefits for each option clearly shows that the preferred option has the greatest overall score. There have been no developments to require this exercise to be revalidated.

Non-Financial Risks

8.18 The OBC identified that the lowest risk option was a new build offsite solution when compared to the alternate solutions considered. This FBC takes forward that solution and the risk management activities undertaken by the Project Team and discussed elsewhere in this report have not uncovered any additional risks that require a reappraisal of the position outlined in the OBC.

Conclusion

- 8.19 The OBC included a robust economic option appraisal process that identified a preferred option to take forward a new build district general hospital on a greenfield site. A review of the underlying components of the economic appraisal has not uncovered any material items that would lead to a requirement to challenge the OBC solution.
- 8.20 The decision has also been validated by the further work that has taken place since the OBC in developing the preferred option with bidders resulting in lower than anticipated costs and a continued focus on driving out quality benefits.

THE COMMERCIAL CASE

9 Negotiated Deal and Contractual Arrangements

Purpose

The purpose of this section is to describe the key commercial details of the agreed contract between the Board and Project Company (Project Co) through the construction and commissioning and operation of the new facilities.

Summary

The project agreement will follow the Scottish Government's standard form NPD procurement model. The model includes a standard risk sharing profile and a performance regime whereby payment is made when agreed availability and performance criteria are met.

The procurement process commenced in June 2013 and an Invitation to Submit Final Tender was issued in July 2014. A Preferred Bidder was identified and announced in September 2014.

A comprehensive enabling works programme is well underway to ensure access to the site.

Agreed Procurement Strategy

- 9.1 The Project is being procured using the Scottish Government Non Profit Distributing (NPD) model. The model was introduced to respond to a pipeline of accommodation projects across arrange of sectors including schools and health.
- 9.2 The model retains the principles that
 - The private sector will provide serviced accommodation;
 - Payment will only commence when the accommodation is complete and ready for use.
- 9.3 The NPD model is defined by three core principles of
 - Enhanced stakeholder involvement in the management of projects;
 - No dividend bearing equity;
 - Capped private sector returns.
- 9.4 It is important to note that the NPD model is not a "not for profit" model.

 Contractors and lenders are expected to earn a normal market rate of return as

- in any other form of privately-financed PPP deal. Rather, the model aims to eliminate uncapped equity returns associated with the traditional PFI model and limit these returns to a reasonable rate set in competition.
- 9.5 The traditional PFI/PPP model gives little visibility for the public sector over the governance and management of the Project Company. The appointment of an independently nominated Public Interest Director (known on the early NPD projects as the "Independent Director") to the Project Company's board is a feature that is specific to the NPD model.

Agreed scope of services

- 9.6 A description of the services is included at Appendix 3.
- 9.7 The Project will be delivered using the Scottish Government's NPD model. High Wood Health (Project Co), a special purpose vehicle, jointly owned by Laing O'Rourke and Aberdeen Asset Management will provide the funding from a combination of senior and subordinate debt underpinned by a 25-year service concession contract.
- 9.8 Project Co will be responsible for providing all aspects of design, construction, ongoing facilities management (hard maintenance services and lifecycle replacement of components) and finance throughout the course of the project term.
- 9.9 Soft facilities management services (such as domestic, catering, portering) are excluded from the Project Agreement with Project Co and these services will be provided by NHS Dumfries & Galloway.

Agreed Risk Allocation

- 9.10 The standard form NPD Project Agreement introduces changes to the risk transfer mechanism that previously existed for PPP/PFI hospital agreements and these are as follows;
 - Title risk (other than the risk of compliance with disclosed title information and/or Reserved Rights) is taken by the public sector;
 - Risk of physical works being required to the facilities because of any unforeseen change in law during the operational period is retained by the public sector;

- Energy usage and price risks are retained by the Board, but service standards have been added to incentivise the service provider to do those things that significantly influence energy consumption and are within its control;
- Insurance premium risk sharing in relation to market-related changes has been dropped so that insurance premiums become mainly a pass-through cost, but measures have been added to ensure that the project insurances are procured on terms that represent best value for money for the Board.
- 9.11 The general principle underpinning risk allocation is to ensure that the responsibility for risk rests with the party best able to manage them. This means that the design, construction and operational risk lie with the private sector.
- 9.12 In previous PFI projects, malicious damage to the facilities was a risk borne by the private sector, however, the NPD contract returns this to the public sector although the Preferred Bidder will still provide reactive maintenance to rectify malicious damage, subject to reimbursement of costs. Internal decoration is excluded from the hard FM maintenance service. This results in the Board having periodic maintenance obligations of this item to ensure that the facilities are maintained at the appropriate level.
- 9.13 The standard form NPD Project Agreement assumes the following apportionment of risk.

Risk Description	Allocation		
	NHS	Project Co	Shared
1. Design risk		٧	
2. Construction and development risk		٧	
3. Transitional and implementation risk		٧	
4. Availability and performance risk		٧	
5. Operating risk			٧
6. Variability of revenue risks		٧	
7. Termination risks			٧
8. Technology and obsolescence risks		٧	
9. Residual value risks		٧	
10. Financing risks		٧	
11. Legislative risks			٧
12. Sustainability risks			٧

- 9.14 **Design risk** sits with Project Co, subject to the Project Agreement (Clause 12.5) and agreed derogations identified within the Board's Construction Requirements
- 9.15 Subject to NHS Dumfries & Galloway, ensuring that any relevant enabling works have been completed, the **construction and development risk** or the facilities sits with Project Co, subject to the Project Agreement. For example, a small number of delay and compensation events could entitle Project Co to The Five Case Model The Commercial Case

- compensation if the events materialised, such as no access to the site and incomplete enabling works which impact upon the site.
- 9.16 **Transition and implementation risk** prior to the actual completion date sits with Project Co in accordance with the Board's Construction Requirements and agreed commissioning timetable. After the actual completion date, the transition and implementation risk shall sit with the Board in line with the agreed commissioning timetable.
- 9.17 **Availability and performance risk** sits entirely with Project Co subject to the provisions of the Project Agreement.
- 9.18 **Operating risk** is a shared risk, subject to NHS Dumfries & Galloway and Project Co's responsibility under the Project Agreement. For example, Project Co shall be responsible for "hard" services and NHS Dumfries & Galloway shall be responsible for "soft" services.
- 9.19 Variability of revenue risk is a Project Co risk subject to adjustments of the Annual Service Payment under the Project Agreement. However, NHS Dumfries & Galloway shall be responsible for all pass through utility costs such as energy usage and direct costs such as insurance and local authority business rates, all of which are subject to different factors such as indexation.
- 9.20 **Termination risk** is a shared risk under the Project Agreement with both parties being subject to events of default that can trigger termination.
- 9.21 **Technology and obsolescence risk** predominantly sits with Project Co. However, NHS Dumfries & Galloway could be exposed through specification and derogation within the Board's Construction Requirements, obsolescence through service change during the period of functional operation and relevant or discriminatory changes in law under the Project Agreement.
- 9.22 **Residual value risks** sit with Project Co until the end of the Project Term and shall sit with the Board thereafter. In relation to the handback of the facilities by Project Co at the end of the Project Term, Project Co must ensure that the facilities meet certain key standards or shall be required to pay to rectify the facilities in order that it meets certain key standards.
- 9.23 **Financing risks** predominantly sit with Project Co subject to the Project Agreement: however, relevant changes in law, compensation events that compensate Project Co and changes under the Project Agreement all may give rise to obligation to NHS Dumfries & Galloway to provide additional funding.

Board voluntary termination may also bring an element of reverse risk transfer due to aspects of the funding arrangement with the funder.

- 9.24 **Legislative risks** are shared subject to the Project Agreement. Whilst Project Co is responsible to comply with all laws and consents, the occurrence of relevant changes in law as defined in the Project Agreement can give rise to compensation to Project Co.
- 9.25 **Sustainability risks** are proportionately shared subject to the Project Agreement. Project Co is obliged to comply with the Board's Construction Requirements in terms of sustainable design and construction, which includes achieving a Building Research Establishment Environmental Assessment Methodology (BREEAM) overall score of 'very good', and an 'excellent' level of performance for the credit pertaining to Reduction in CO Emissions, which sets the Energy Performance Target for the Facilities. Project Co is further obligated to perform tests on completion to demonstrate that its design and construction meets NHS Dumfries & Galloway's energy performance target, and is required to ensure that these standards are continually upheld by ensuring energy efficient operation of Plant in line with an agreed energy strategy and through maintenance and lifecycle of hard FM components. However, NHS Dumfries & Galloway ultimately carries the operational volume and price risk relating to the actual operating energy and utilities consumption of the facilities.

The Dumfries and Galloway NHS Acute Services Redevelopment project will deliver a BREEAM rating of "Very Good" and includes a minimum of 6 credits in ENE01, an 'excellent' level of performance for the credit pertaining to Reduction in CO Emissions.

The hospital is being designed to meet the energy target of 41.9Gj/100m³

Agreed Payment Mechanism

- 9.26 The performance monitoring for the Project will follow the standard form NPD Project Agreement issued by Scottish Futures Trust on behalf of the Scottish Government. The Annual Service Payment will only commence when the hospital is complete and ready for use.
- 9.27 The Board will only pay for available facilities and deductions will be made if the facilities are not available or services are otherwise not provided in accordance with the Board's requirements and specifications.

9.28	The Payment Mechanism provides a warning notice and termination trigg mechanism if the level of deductions becomes unacceptable	er

Key Contractual Clauses

- 9.29 As noted above, the Project Agreement is based on the standard form NPD Agreement tailored to the requirements of the project. Bidders were given the opportunity to comment on and discuss potential changes to the Project Agreement during the Competitive Dialogue phase of the procurement. SFT approved the list of proposed amendments to the Agreement as part of the close of dialogue and issue of Invitations to Submit Final Tenders.
- 9.30 No material changes will be accepted to the Project Agreement other than resolution of minor drafting and those highlighted by the approved amendment schedule.
- 9.31 The concession has an agreed operational period of 25 years.

Community Benefits

- 9.32 The Project Agreement includes specific clauses to enable a range of Community Benefits on behalf of the people of Dumfries and Galloway that will take effect throughout the concession period. This includes
 - Apprentice and graduate opportunities
 - Ensuring that local business are best placed to bid for sub contracts
 - Providing Learning Opportunities
 - Reaching other, sometimes disenfranchised, groups though Social Enterprise structures
 - Engaging with local schools and colleges
 - Sustainability
- 9.33 Further details are at Appendix 12. Failure to achieve the targets outlined in the Project Agreement is taken into account in the Performance Management Mechanism and penalties result for non-compliance.

Personnel Implications (TUPE)

9.34 The responsibility for Hard FM will fall to Project Co as set out in the standard NPD contract. NHS Dumfries and Galloway will remain responsible for some

aspects of the ongoing maintenance of the new build as well as being solely responsible for the remainder of the retained estate. No estates staff will transfer under TUPE.

Procurement Process

- 9.35 In June 2013, NHS Dumfries & Galloway published a contract notice on the Official Journal of the European Union (Ref: 212004-2013 (2013/S 124-212004). Pre qualification submissions were received in September 2013 from the following five applicants:
 - Balfour Beatty;
 - High Wood Health;
 - Skanska;
 - IHS;
 - Horizon.
- 9.36 Following a detailed review the Board shortlist three applicants to continue in the project:
 - Balfour Beatty;
 - High Wood Health;
 - Skanska.
- 9.37 A copy of the Evaluation Report on Short-Listing of Bidding Consortia approved by the Project Board is included as Appendix 4.
- 9.38 The Invitation To Participate in Dialogue was issued in April 2013.
- 9.39 Following a detailed dialogue period, the Invitation to Submit Final Tenders invited each bidder to submit final proposals on 4th July 2014.
- 9.40 A detailed evaluation was undertaken; this resulted in the selection of High Wood Health as the most economically advantageous tender.
- 9.41 Both Bidders were awarded a 'pass' by Shepherd and Wedderburn for their Final Tender Legal submissions to the Board.
- 9.42 A copy of the Financial Evaluation of Final Tenders and selection of the Preferred Bidder approved by the Board is included as Appendix 5 with details of the key elements of Preferred Bidder Funding Protocol contained in Appendix 6.

- 9.43 A range of enabling works, funded through traditional capital sources, is currently underway. The aim is to provide a fully serviced site at Garroch Farm by the end of 2014 to expedite the NPD agreement construction activities in early 2015.
- 9.44 The servitudes in respect of the Gas and Power installations have been completed and the works have commenced.

Foul Water drainage remains outstanding at this point in time. Discussions are well underway with Scottish Water (the agency responsible) to establish appropriate capacity for the area and the requirement for the new hospital to tie into these facilities.

Further detailed analysis work has been undertaken in conjunction with Scottish Water and HWH on the existing sewerage network into which the Hospital will discharge.

Following a number of meetings with Scottish Water and SEPA, a strategy has now evolved and there is cross party consensus on a preferred and sustainable technical solution to meet the present and potentially future demands of the new hospital that represents best value for money but is not funded for as part of the original OBC. A new Pumping Station, (rather than upgrading the existing pumping station which, as previously advised, was envisaged as per the OBC on the basis of consultancy advice provided by Scottish Water Horizons at the site selection stage) is to be vested in Scottish Water (i.e. adopted by Scottish Water immediately after commissioning), will be constructed to the north of Garroch Loaning on land owned currently by third parties. The Pumping Station shall serve the Hospital together with other development in the area including the existing demand arising from the Garroch Industrial Estate... The Pumping Station will discharge to the existing Cargenbridge Pumping Station (also to be upgraded), which in turn pumps forward to the Troqueer sewerage network. Troqueer Wastewater Treatment Works currently handles the existing DGRI.

9.45 The engineering feasibility of the civils works associated with the proposals has been examined and a costing prepared. Detailed design work will shortly commence. It is anticipated that the new Pumping Station shall be operational by early 2016. In the interim and anticipated from July 2015 onwards, consequential temporary sewage disposal costs arising from HWH's construction village will be incurred as liability for the Board as HWH's tender is predicated on

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a site that had access to a permanent sewage connection — something that clearly will not be available until the new pumping station comes into operation and is maintained by Scottish Water. In terms of reaching financial close, HWH require certainty as to the proposed programme and that Scottish Water will adopt the new pumping station (to be constructed on behalf of Scottish Ministers serving the new hospital and the existing Garroch Industrial Estate) as soon as it has been completed. A provision in the PA is being drafted by HWH in order to cover their concerns and the concerns of the Lender's Technical Advisor in this matter. SFT have been kept fully informed of the situation and this proposed way forward to reach Financial Close.

- 9.46 The road works associated with the project, principally the Garroch Roundabout and the realignment of the Glen Road, are complete and operational. Further minor junction alterations are being taken forward under a S69 agreement with Dumfries and Galloway Council and will be complete in advance of the hospital opening.
- 9.47 A Feasibility Study on the maximum utilisation of the aquifer beneath the site is due to commence in November 2014. This feasibility study will determine whether the water is of potable quality and the opportunity to harvest heat generation.

Town and Country Planning

- 9.48 Planning in principle for the Project was achieved as part of the OBC process.
- 9.49 Town planning matters, in respect of detailed planning permission, are managed by High Wood Health and their planning advisers, with input from NHS Dumfries and Galloway supported by planning and technical advisers. The consultation period for the town planning submission has ended and determination expected on 16th December 2014.

Conclusion

- 9.50 The project agreement will follow the Scottish Government's standard form NPD procurement model. The model includes a standard risk sharing profile and a performance regime whereby payment is made when agreed availability and performance criteria are met.
- 9.51 The procurement process commenced in June 2013 and an Invitation to Submit Final Tender was issued in July 2014. A Preferred Bidder was identified and announced in September 2014.
- 9.52 A comprehensive enabling works programme is well underway to ensure access to the site.

THE FINANCIAL CASE

10 The Financial Case

Purpose

This section of the FBC sets out the financial impact of the proposed deal. The primary aim is to reconfirm the overall affordability position presented as part of the OBC for both NHS Dumfries and Galloway and Scottish Government

The case will clearly highlight the impact of the following:

Recurring revenue costs
Capital costs

Non-recurring costs

Impact on the income and expenditure account and balance sheet

The associated accountancy treatment

Overview

- 10.1 All costs and assumptions presented as part of the OBC have been reviewed and re-tested to ensure the finance case continues to clearly set out what additional costs are expected as well as the classification of these costs, the clarity on the source of funding and ultimately demonstrate the overall affordability as previously presented.
- 10.2 The cost models have been identified using assumptions generated from the input of external advisors as well as the senior management team at NHS Dumfries & Galloway.
- 10.3 Costs that were included in the OBC in relation to Cresswell have been separately identified and will require to be updated further as part of the separate business case.

NPD Funding Letter Conditions

- 10.4 This project has been taken forward under the Non Profit Distributing funding model (NPD); this is a revenue-funded scheme unlike the traditional capital funded route most commonly used in recent NHS Dumfries & Galloway projects.
- 10.5 The funding letter that was received as part of the OBC approval set out a range of conditions on which the funding would be available, the table below sets out a number of the financial condition along with the preferred bidder position at Final Tender.

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Cost Element	Conditions	Funding Letter	Preferred Bidder
Construction Cost Cap	Cap set at £179.8m plus inflation using the BCIS all in TPI index at Invitation to Submit Final Tender	£ 225.390m	
Private sector development costs	Estimate that these costs will be in the region of 3-5% of the capital value of the project	3-5%	%
SPV Operating costs	Expectation per funding letter is £0.3m excluding insurance costs at Q2 2013 prices, adjusted to Q3 2014 for comparison	£0.308m	m
Lifecycle maintenance costs	Board to seek to secure competitive, value for money proposal against relevant external benchmark for cost per m2	£27.00	

- 10.6 The funding letter highlights that the Construction Cost Cap assumes that the project will deliver the scope as detailed in the OBC. Should the Board choose to expand the scope beyond what is detailed in the OBC, or if the Project is not deliverable within the Construction Cost Cap, the Board will be required to fully fund any resultant increase in the unitary charge, including the inflationary impact over the term of the contract.
- 10.7 The capital cost highlighted above is the Final Tender price and is still subject to design development that is ongoing as the project specifications are finalised in conjunction with High Wood Health. Although this cannot yet be quantified, the project team are minimising any financial impact.
- 10.8 The Board are aware that the tender price now represents the construction cost cap set by SGHSCD and therefore any consequent increase in the Annual Service Payment (ASP) will be the responsibility of NHS Dumfries and Galloway.
- 10.9 At this time, the only material changes that are being discussed are in relation to office accommodation and isolation rooms. As these are not yet quantified, it has not been included in the affordability model, any increase of unitary charge in relation to this will require to be funded as part of the overall Financial Plan.

10.10	The ASP that the Board will pay in relation to the costs highlighted in the table is included in the Recurring Revenue section below.

11 Recurring Revenue

- 11.1 Recurring revenue expenditure are those costs that NHS Dumfries and Galloway incur on an ongoing basis to provide health services. They continue to recur year on year until a change is instigated which will remove or reallocate these costs. These are unlike non-recurring costs that are one off and are discussed later in the case.
- 11.2 As was highlighted within the OBC not all areas have been reviewed in detail as part of this business case process as they are not directly linked to the move to the new facility. These continue to present a financial risk to the Board and are being reviewed in the wider context by the Board as part of the relevant workstream and will require to be managed as part of the overall Financial Plan.
- 11.3 The majority of the recurring revenue implications for the project are largely attributable to the NPD unitary charge however there are a number of other costs elements that need considered as part of the overall affordability of the project including depreciation, service running costs, facilities management costs and building running costs. A review of the revised costs against those set out in the OBC is further detailed below.

OBC Summary

11.4 The OBC identified an overall recurring revenue funding requirement of £33.619m at 12/13 prices as per the table below.

REVENUE COSTS	Existing	Revised	Movement
@ 12/13 prices	£'000	£'000	£'000
Unitary Charge	£ -		
Depreciation	£ 2,115	£ 6,840	£ 4,725
Service Running Costs	£ 18,676	£ 20,059	£ 1,382
Facilities Management	£ 6,772	£ 6,537	(£ 235)
Building Running Costs	£ 2,537	£ 3,564	£ 1,028
Other Costs	£ -	£ 104	£ 104
	£ 30,100		

NHS D&G		SGHSCD	
£'000		£'000	
£	1,925	£ 2,800	
£	1,382	£ -	
(£	235)	£ -	
£	1,028	£ -	
£	104	£ -	

11.5 The Board approved support of £6.66m with the balance being supported by SGHSCD. To ensure a level of contingency and recognition of inflation the Board set aside £7.8m within the financial plan.

11.6 The following sections provide an update on the movement on these costs in relation to inflation, updated cost estimates and any additions identified since the approval of the OBC. In addition, the case sets outs what costs have specifically not been included and will be managed through the usual Financial Planning process.

Impact of Inflation

11.7 The impact of inflation has been modelled, the table below sets out the updated costs for NHS Dumfries and Galloway at 2014/15 prices to allow comparison.

REVENUE COSTS	Existing	Revised	Movement
@ 14/15 prices	£'000	£'000	£'000
Unitary Charge	£ -		
Depreciation	£ 2,115	£ 4,260	£ 2,145
Service Running Costs	£19,102	£20,519	£ 1,417
Facilities Management	£ 6,989	£ 6,703	(£ 286)
Building Running Costs	£ 3,177	£ 4,372	£ 1,195
Other Costs	£ -	£ 107	£ 107
	£31,383		

OBC		Inflation	
£'000		£'000	
£	1,925	£	220
£	1,382	£	35
(£	235)	(£	51)
£	1,028	£	167
£	104	£	3

OBC at 12/13 prices	£30,100		
Movement in Prices	£ 1,283	£ 1,790	£ 508

11.8 The following table sets out the percentages used for uplifting the specific elements.

Assumption - Uplift %	2013-14	2014-15
Pay - Agenda for Change (Above Band 5)	1.00%	1.00%
Pay - Agenda for Change (Below Band 5)	1.40%	1.70%
Non Pay (excluding energy)	3.00%	2.00%
Energy Costs	16.00%	12.50%
RPI	0.00%	0.00%
СРТ	0.00%	1.70%
Rates	2.84%	2.34%

Unitary Charge Payment

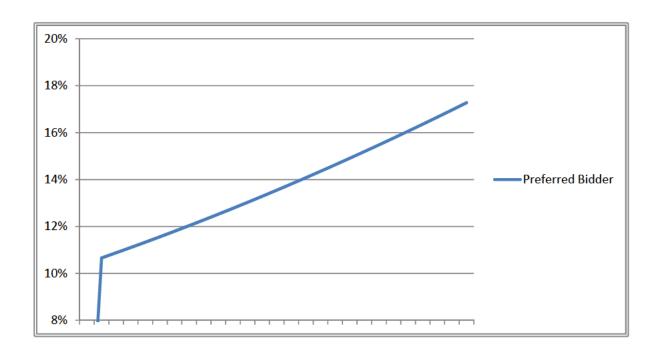
- 11.9 An annual service payment (ASP) known as the unitary charge will be paid for the provision of the facilities that covers the design, build, finance and maintenance of the new hospital on a monthly basis over the 25-year life of the contract.
- 11.10 As part of the final tender, the preferred bidder supplied a financial model that projected the ASP over the life of the contract. The table below shows the value of the ASP over the 25-year life broken down by element.
- 11.11 The outcome of the funding competition will have an impact on the final ASP that will not be known until financial close. The funding terms used in the FBC were based on the final tender document attached. These have now moved as a result of the funding competition.

Components of ASP	Description	Cost	over 25yrs £k
Repayment of capital and associated financing costs	Repayment of the original capital cost, interest associated with senior and subordinated debt borrowing and surpluses		
Special Purpose Vehicle Costs	Administering, insuring, debt monitoring fee and running costs of the SPV	£	
Facilities Management (Hard FM)	Cost of maintaining the building	£	
Lifecycle maintenance costs	Replacement cost of major equipment during the life of the project, for example replacing boilers and lifts	£	
Surpluses	Represented by excess cash in the model returned to the public sector. Surpluses exist due to the banking cash requirements and the variable nature of the operating cost, for example lifecycle.	£	
Other	Including tax and interest on cash	£	
Total		£	

- 11.12 NHS Dumfries and Galloway will be required to support 50% of lifecycle maintenance costs and 100% of hard facilities maintenance costs with the Scottish Government supporting all other costs including construction costs, development costs, financing costs and SPV running costs.
- 11.13 The following table provides a summary of the ASP at the beginning and end of the contract and the proportion attributable to the Board and SGHSCD. The final tender shows a first full year (2018/19) unitary charge of £ m compared to the estimate at OBC of £ m, a reduction of £ m.

	First Full Year Final Full Year Impact 2018/19 Impact in 2041/42 fk		Average over 25 years £k
Annual Service Payment			-
SGHSCD Total			
SGHSCD % Share	89%	83%	86%
NHS Total			
NHS % Share	11%	17%	14%

- 11.14 The table shows an increase in the element of the ASP payable by NHS Dumfries and Galloway from from in the first full year of operation to from in 2041/42, reflecting the differential impact of inflation on the components of the unitary charge. The maintenance elements (lifecycle and facilities management costs) as well as the SPVs operational running costs are increased annually based on the Retail Price Index (RPI). The balance of the charge remains flat throughout the duration.
- 11.15 The table below shows the Boards share of the ASP over the period of operations.



11.16 The Board will require to agree with SGHSCD the budgeting arrangements for funding the ASP, however for the purposes of this financial case it assumes that NHS D&G will be responsible for their share of the ASP as it is shown and not on an average basis. All future inflation will require to be built into the financial plan.

Depreciation

11.17 Depreciation reflects the impact of capital expenditure over its useful life. The OBC assumption has been updated to reflect the increased capital requirement for equipment that has been identified as well as the likely asset life identified by Health Facilities Scotland. As the equipment list continues to be refined, any movement in depreciation will require to be reflected in the financial plan; however, it is thought that the current estimate is prudent.

Service Running Costs

- 11.18 The finance work stream has reviewed the service running costs against those identified in the OBC and have highlighted a number of changes.
- 11.19 The overall nursing model remains as previously presented reflecting the effect of single rooms and new models of care. Since OBC, there has been a review of current nursing establishments, by senior nursing professionals within the Board, taking account of the increasing acuity and dependency of patients in the acute

- wards. This has resulted in a planned phased investment of up to £670k that is included in the financial plan.
- 11.20 The medical model for the new hospital will be continuously under review as models of care are introduced. In recognition that there may need to be changes to the current staffing model there has been a cost of £354k added to the recurring revenue costs which had not been included in the OBC. This relates primarily to the new models of care within the combined assessment unit and the downstream wards resulting in a potential increase in both senior and middle grade staffing.
- 11.21 Recognising that NHS Dumfries and Galloway are looking to actively engage and involve volunteers in the new build in the same way as they are involved currently, an estimate of £65k has been made to support the co-ordination of an increased team of volunteers and reimbursement of travel costs.
- 11.22 The introduction of robotics within the Pharmacy department was included within the OBC; the service manager has indicated that the level of saving previously anticipated is too high given the continually increasing level of activity and the anticipated level of service that will require to be maintained in the new build. The saving has therefore been reduced by £35k (1.50WTE). It is recognised however that the increased level of activity in the pharmacy store can be achieved without additional investment in staff if the robot is in place.
- 11.23 A planning assumption has now been included that £2m of equipment purchased will be development equipment and an estimate of £240k has been included in the recurring revenue model to support the service contract element of this. This was not included in the OBC assumptions. As the equipment list continues to be refined, any development equipment will be required to follow the existing Board approval process that includes identifying the funding of service contracts.

Facilities Management Services

- 11.24 The matrix of FM services has now been developed as part of the competitive dialogue process. Soft FM services (domestics, catering, and portering) will continue to be provided by NHS Dumfries and Galloway and the majority of hard FM services (property maintenance, lifecycle) will be delivered by the Project Co.
- 11.25 In the OBC, existing FM services were used as a benchmark to assess the potential additional funding required. Following appointment of preferred bidder

- and utilising the near finalised design the service managers have reviewed and refined the service needs using local expertise to reflect actual requirement.
- 11.26 A detailed review by the domestic service manager, using both national staffing tools and local staffing models has been able to refine the OBC estimates resulting in a reduction in estimated cost of £359k (22.07WTE) whilst still ensuring that the national cleaning specification is delivered.
- 11.27 Additional budget of £57k (2.05WTE) has been provided for portering services recognising the size of the hospital and the different delivery model being proposed.
- 11.28 The provision of an equipment bank within the Medical Physics department has been running a 12-month pilot to identify if it would improve equipment management and utilisation. This has proved successful to date and has now been built in on a recurring basis at a cost of £23k (1.00WTE).
- 11.29 No provision in the OBC was made for minor repairs and changes that may be required at the new hospital and are not covered by the ASP. At this time, this £100k has been included as a provisional sum and will require to be reviewed as the building becomes operational. An additional £40k has been included to recognise the increased grounds maintenance service that will be required. Innovative solutions for the delivery of this service will continue to be explored in advance of opening the new hospital to mitigate this additional cost.

Building Running Costs

- 11.30 There are also a number of building related costs which will continue to be payable by NHS Dumfries and Galloway including gas, electric, water and rates.
- 11.31 The utilities are included as part of the contractual agreement and will be charged back to NHS Dumfries and Galloway as a pass through cost. The energy model continues to be further developed with the preferred bidder however this will not be available until early 2015, at this time no change has been included in the model over and above the impact of inflation.
- 11.32 An indicative cost for rates was provided by the local valuation office for the OBC. The size of the building has increased resulting in an additional £187k.
- 11.33 The 2017 planned rates revaluation has not been included within this affordability model as this will impact on all properties held by the Board and is

not a direct consequence of moving to the new hospital. It should be noted however that this is of significant value estimated at circa £1.2m for the new hospital alone.

Other Costs

11.34 The OBC included costs in relation to the subsidised bus route and travel arrangements between sites, these have been reviewed and no changes are expected with the exaction of inflation.

Summary of Affordability

- 11.35 As described earlier the Scottish Government will be required to support the majority of the unitary charge subject to a number of conditions. NHS Dumfries and Galloway are therefore required to support all the other additional costs.
- 11.36 Following the further work that has been carried out to review the indicative costs identified at OBC and described throughout the finance case the revised funding requirement is £31.829m as per the table below.

REVISED COSTS	Existing	Revised	Movement
	£'000	£'000	£'000
Unitary Charge	0		
Depreciation	2,115	7,414	5,299
Service Running Costs	19,102	21,213	2,111
Facilities Management	6,989	6,564	(425)
Building Running Costs	3,177	4,559	1,382
Other Costs	0	107	107
	31,383		

NHS D&G	SGHSCD
£'000	£'000
2,499	2,800
2,111	0
(425)	0
1,382	0
107	0

OBC	30,100		
Difference	1,283	(507)	(1,790)

1,555	(3,345)

- 11.37 SGHSCD share has reduced by find m as a result of the unitary charge put forward by the preferred bidder. The differences to the OBC are detailed in the NPD funding letter conditions section above.
- 11.38 The Board approved the £6.6m identified as part of the OBC and the current financial plan is set to deliver £7.8m by 2017/18 specifically for the recurring

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revenue costs, to date £5.8m has been released with the balance planned to be delivered in future year plans. The table above shows that the Board share has now increased to £8.215m that will require the Board to invest a further £0.415m above that set aside in the Financial Plan.

11.39 The following table sets out for NHS Dumfries and Galloway the movement from the £6.66m approved at OBC compared to that now identified and described above:

MOVEMENT FROM OBC FOR NHS DUMFRIES AND GALLOWAY			Additions £'000	Changes £'000	Revised £'000	
UNITARY CHARGE						
DEPRECIATION	1,925	220	0	354	2,499	
Nursing Staffing	1,378	35	0	0	1,413	
Pharmacy	(60)	(1)	0	35	(27)	
Medical Staffing	0	0	354	0	354	
Volunteer Service	0	0	65	0	65	
Service Contracts - New Equipment	0	0	240	0	240	
Other (CSSD/Ophthalmology)	64	1	0	0	65	
TOTAL SERVICE RUNNING COSTS	1,382	35	659	35	2,111	
Maintenance	(1,500)	(76)	0	140	(1,436)	
Non Clinical Services	1,265	25	23	(302)	1,011	
TOTAL FACILITITY MANAGEMENT COSTS	(235)	(50)	23	(162)	(425)	
Rates	946	147	0	187	1,280	
Other (Energy, Water, Fibre link)	82	20	0	0	102	
TOTAL BUILDING RUNNING COSTS	1,028	167	0	187	1,382	
OTHER COSTS	104	3	0	0	107	
TOTAL INCREASE FOR NHS D&G						

Areas of Risk

- 11.40 As stated in the OBC there are a number of risks that have not been included in this business case process and will require to be considered by the Board in the wider context and are likely to present significant financial risk.
- 11.41 For clarity, those risks that are not included along with further risks/assumptions identified during this process are detailed below.

11.42 Identified at OBC

- Medical Staffing Challenges
- AHP changes to models of care
- Changes in working hours and on-call arrangements across all professions
- Impact of service redesign through PYF programme and strategic change programme
- Changes required in community and cottage hospitals
- Local workforce demographics
- Any increase to the Cresswell unitary charge as a result of the proposed refurbishment

11.43 Identified at FBC

- Impact of the 2017 Rates Revaluation
- Any change to the ASP as a result of project scope changes
- Any change to the ASP as a result of service redesign affecting the project scope
- Impact on service contracts if more than £2m approved as developments or if higher level of cover than existing is required
- Impact of the finalised energy model
- Cost of opening remaining ward beds
- Agreement of budget transfer from SGHSCD to cover unitary charge share
- Backlog maintenance on remaining estate is contained within reduced budget
- Inflationary impact from 2014/15 to 2017/18
- The continued level of Cash Releasing Efficiency Savings (CRES) can still be delivered taking cognisance of the level of ring-fenced budgets now included within this business case.

Conclusion

- 11.44 The risk that the Boards revenue cost implications are underestimated is reflected as risk number 64 on the project risk register. This risk has been updated to reflect the increased costs identified within the finance case. As a result of the additional investment of £0.415m required by the Board, although the risk value increases the overall risk score remains as an amber risk and this continues to be an acceptable level of risk for the Board. Work will continue to mitigate any further increase in costs.
- 11.45 The Board acknowledge that a number of risks are not included within the £8.215m recurring investment highlighted within the Finance Case. This financial

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risk will be reviewed in the wider context of the Boards financial planning risk held within the corporate risk register as well as the associated risk to service delivery. Based on the information presented above an increase of £ m at current day prices is required to take forward this project.

- 11.46 For NHS Dumfries and Galloway the investment is £8.215m, a movement of £1.555m from the OBC estimate. £1.14m of this is already built into the financial plan leaving £0.415m that will require to be built into financial plans in advance of 2017/18.
- 11.47 The financial case presents an affordable model for NHS Dumfries and Galloway however, given the significant financial implications of this service change considerable financial rigour will need to be maintained to ensure the level of review and challenge continues to close the recurring revenue gap.
- 11.48 The Scottish Government have already identified a share of the NPD revenue budget to support the new build project. The challenge for NHS Dumfries and Galloway will be to continue to ensure value for money is delivered through the funding competition.

12 Capital

- 12.1 The following section sets out an update of the approved capital funding which is required for the project.
- 12.2 The total estimated capital requirement identified as part of the OBC was £53m (excluding Optimism Bias); this has been updated to reflect any known changes to price, timing and the impact of inflation. The following table sets out at a high level the movement against the OBC Estimate.

CAPITAL COSTS £'000's	OBC ESTIMATE	REVISED ESTIMATE	MOVEMENT
Non NPD Costs	33,226	40,118	6,893
Cresswell	12,695	13,989	1,294
Existing Site Costs	7,098	7,604	506
	53,019	61,711	8,692

Inflation	Price	Timing
494	6,272	127
1,374	0	(80)
752	(284)	37
2,620	5,988	84

12.3 Details of the price and timing changes are presented below against the separate business cases that are being taken forward. The £2.6m movement in inflation reflects the change to the indices used to prepare the OBC.

Non-NPD Costs

12.4 The following table sets out the revised capital costs associated with the NPD project.

CAPITAL COSTS	ОВС	REVISED	
£'000's	ESTIMATE	ESTIMATE	MOVEMENT
Land acquisitions	810	816	6
Roadworks	2,414	2,741	327
Utilities	1,261	1,277	17
Fibre Connection	998	1,143	144
Equipment	27,424	33,822	6,398
Fees	319	319	0
	33,226	40,118	6,893

Inflation	Price	Timing
0	6	0
205	85	38
96	(100)	21
76	0	68
117	6,281	0
0	0	0
494	6,272	127

- 12.5 The main changes from the OBC are:
 - Land acquisitions are now complete and are priced at final cost.
 - All roadworks with the exception of the works to secondary roundabout and signage are now agreed or complete and included at fully tendered or agreed price. The timing increase was an error at OBC relating to the timing of the secondary roundabout works.
 - All utilities with the exception of the foul water are at tendered price, the movement in price reflects the saving delivered from the water, gas and electric contracts. The cost increase for timing relates to the ongoing challenges faced by the Project Team in delivering the foul water solution that was budgeted for 2014/15.
 - The delivery of the fibre connection between sites is currently being pursued; joint delivery has been explored with the local Council to identify if mutual benefit and efficiencies can be delivered. Given the complexities of the procurement of this type of project, the timing for delivery of this has been adjusted causing an increase in cost. In addition, as part of the delivery of the transport works carried out, an element of this work has been completed, the budget has not been adjusted to reflect as no further cost certainty is available until the tender has been returned.
 - The main change to the capital cost model is the £6.281m increase in equipment costs. This is based on the draft equipment list provided by HFS and the internal IT department however, as work on the 1:50's is still ongoing with the workstreams this is still draft and will require further refinement. Opportunities for further efficiencies have been explored to date with HFS to ensure maximum procurement discounts can be achieved. This will be further explored as the equipment procurement is progressed.
 - The OBC assumed a 15% level of transfers, this has been retained and equates to £4.7m inc. VAT.
 - A review of the equipment list has identified circa £10m that is below the current £5k capitalisation threshold. At this time, the assumption remains the same as at OBC that this will be capitalised as one equipping asset and not funded from revenue.
 - NHS Dumfries and Galloway Capital Investment Group are actively involved in monitoring this plan

Cresswell Reconfiguration

12.6 Work is now underway through the Framework 2 contract to develop the full business case for this work, which will include a fully worked up cost plan. As a

result, the OBC assumptions remain unchanged with the exception of the timing of the work that has been updated to reflect the earlier completion of the NPD project. The table below shows the movement since OBC.

CAPITAL COSTS £'000's	OBC ESTIMATE	REVISED ESTIMATE	MOVEMENT
Reconfiguration	9,858	10,925	1,067
Equipment	1,462	1,639	177
Existing DGRI work	511	561	50
Fees	864	864	0
	12,695	13,989	1,294

Inflation	Price	Timing
1,138	0	(71)
177	0	0
59	0	(9)
0	0	0
1,374	0	(80)

Existing Site Costs

12.7 Work is now underway through the Framework 2 contract to develop the full business case for this work, which will include a fully worked up cost plan. As a result the OBC assumptions remain unchanged with the exception of the work planned at the dental centre that is now not required. The table below shows the updated costs to reflect the current changes.

CAPITAL COSTS	ОВС	REVISED	
£'000's	ESTIMATE	ESTIMATE	MOVEMENT
Energy Centre	2,328	2,671	343
Existing site	2,101	2,329	227
Dental Centre	259	0	(259)
Site Demolition	1,783	1,977	194
Fees	627	627	0
	7,098	7,604	506

Inflation	Price	Timing
227	0	116
243	0	(15)
25	(284)	0
258	0	(63)
0	0	0
752	(284)	37

12.8 As a result of the earlier delivery of the NPD project the timing of the existing site services work and the site demolition have been brought forward to align with the overall timetable. This is offset with the need to move the works on the energy centre back a year to support the overall NHS Dumfries and Galloway capital plan.

Capital Cost Assumptions

- 12.9 The capital costs have been calculated using the following assumptions:
 - VAT at 20% is included on all costs with the exception of fees (relates to non-NPD capital costs – enabling works and equipping).

- No increase has been reflected for fees, the £1.8m identified at OBC remains the current working assumption.
- Where tendered sums are not yet available, the Q4 2012 OBC prices have been indexed using BCIS indices except for new build equipment that is being indexed by RPI.
- As a result of the revised completion timetable, the timing of expenditure has been adjusted to reflect any movements.
- The capital receipt from the sale of the existing site will be returned centrally, this is estimated for receipt in 2021/22 or thereafter and has not been factored into the total capital requirement.
- Optimism bias has not been included; this was estimated at £3.9m at preparation of OBC.

Timing of Capital Expenditure

12.10 The table below highlights the revised profile of capital funding per year that is required to complete the project. This reflects the current estimates of the likely phasing of the non-NPD capital expenditure through until 2020/21. The main movement on this phasing since the OBC is linked with the earlier anticipated completion date for the hospital, in particular bringing forward the timeline for equipment procurement. These figures include road works, including Garroch roundabout, enabling and fibre link at set out in paragraph 12.4

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	TOTAL
	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
New Build	1,015	2,846	2,211	23,410	10,635	0	0	0	40,118
Cresswell	0	56	100	354	2,963	9,013	1,502	0	13,989
Existing Site	0	24	335	2,788	1,830	649	1,153	824	7,604
Total Capital	1,015	2,926	2,647	26,553	15,428	9,662	2,655	824	61,711

OBC	832	4,128	3,419	0	27,650	10,336	5,205	1,448	53,019
Difference	183	(1,202)	(772)	26,553	(12,222)	(674)	(2,550)	(625)	8,692

12.11 The Local Delivery Plan for 2015/16 will contain a revised capital profile and this will be accommodated by the Scottish Government, as agreed.

13 Non Recurring Revenue Expenditure

- 13.1 Non-recurring expenditure will be incurred as the new building is commissioned; services transferred and become fully operational. This will include initial cleaning costs, removal and transport costs, patient transport, building costs and double running for staff familiarisation, induction and equipment training as well as double running for staff as services operate on a dual site while the transfer is in operation.
- 13.2 A high-level review of non-recurring costs has been carried out and these costs will continue to be developed and refined in the years leading up to the handover.
- 13.3 The Board are in a good financial position with regards to supporting these costs having already identified £3m within future financial plans and having banked a further £7m with the Scottish Government towards these future costs. This level of funding is anticipated to be sufficient to cover nonrecurring costs and will be refined as the commissioning programme is developed.

14 Accountancy Treatment

14.1 This section confirms the impact on the balance sheet that will apply to the assets created by the project and the impact of the transactions on the income and expenditure account.

Impact on Balance Sheet

14.2 Assets within the scope of NPD contract

NHS Dumfries & Galloway Accounts

- 14.3 NHS Dumfries and Galloway are required to prepare annual accounts based on International Financial Reporting Standards (IFRS). An NPD funded project specifically requires to be tested against the guidance set out on Service Concessions (IFRIC12).
- 14.4 The project will be delivered using the standard contract for NPD projects issued by SFT and having considered the guidance the assumption is maintained that the new hospital is within the scope of IFRIC 12. The two conditions met are:
 - The Procuring Authority (NHS Dumfries and Galloway) will control or regulate what services the operator must provide with the infrastructure, to whom it must provide them and at what cost; and
 - The Procuring Authority (NHS Dumfries and Galloway) will control (through beneficial entitlement or otherwise) any significant residual interest in the infrastructure at the term of the arrangement. This second test is considered to have been met if the concession is for the whole of the useful economic life of the assets created.
- 14.5 The asset will be recorded as an asset on NHS Dumfries and Galloway balance sheet.

National Accounts

14.6 Scottish Government is required to prepare annual accounts based on National Accounting Standards as set out in the Manual of Government Deficit and Debt (MGDD). Having considered that the transaction is within the scope of IFRIC12, a further test is required to be satisfied under ESA2010 to consider if the asset is classified as a government asset or the purchase of services by government.

- 14.7 To be considered as a government asset Construction risk and either Demand or Availability risk would require to be borne by the operator. The project will be delivered using the standard contract for NPD projects issued by SFT with limited derogations and project specific elements and therefore the conditions met are:
 - The operator will bear the Construction risk covering events like late delivery, meeting defined specifications and additional cost.
 - The operator will bear the Availability risk covering performance through the volume and quality of output that is controlled primarily through the operation of the payment mechanism.
 - The Board will bear the Demand risk covering variability of demand
- 14.8 The Scottish Government will not record this as an asset on the government balance sheet.
- 14.9 At the time of writing the FBC, a number of changes to the NPD standard contract, specifically in relation to the role of the Public Interest Director in the NPD Project Companies have been issued to the Board by Scottish Futures Trust as an NPD programme wide change. These have been communicated to the Preferred Bidder for Dumfries ASRP. The changes are in response to recently revised guidance in the Manual on Government Deficit and Debt (MGDD) and ESA10 (European System of National and Regional Accounts) which came into effect on 1 September 2014.
- 14.10 The changes to the NPD contract stem from the interpretation of the control characteristics of the NPD model and the determination as to whether the control of the Project Company vehicle sits with the public sector or the private sector. ESA10 defines control as "the ability to determine the general policy or programme of that entity" and sets out a number of control indicators that have been further defined in the revised version of the MGDD. The interpretation of the revised MGDD is that certain public sector rights and vetoes facilitated through the Public Interest Director appointment on the Project Company Board of Directors could appear to afford the public sector control over the "general policy or programme". In response to this interpretation, Scottish Futures Trust has taken steps to amend the contract by removing certain public sector rights and vetoes whilst maintaining the NPD structure. These amendments have been made to the Dumfries ARSP project documentation and communicated to High Wood Health.
- 14.11 The amended control characteristics and transfer of risk to the private sector are considered to continue to support the private sector classification of the project.

Capital Additions

14.12 All assets purchased in relation to the project, detailed under the capital (non-NPD) section, will be recorded on both NHS Dumfries and Galloway and Scottish Government balance sheet as assets with the exception of any expenditure that is to be treated as a capital grant.

Impact on Income and Expenditure Account

14.13 The additional recurring and non-recurring revenue expenditure highlighted in earlier sections will be included within the Boards annual accounts.

Impact on Budgeting

- 14.14 Health Boards' accounts and financial targets are set under International Financial Reporting Standards (IFRS) whereas the SGHD budgetary framework with UK Treasury is operated under UK Generally Accepted Accounting Principles (UK GAAP).
- 14.15 The likely impact on both the Board and Scottish Government's budgets in relation to this business case are summarised below.

Capital	Board Budget	SG Budget	Funding Source
Addition of revenue financed asset onto Board balance sheet	Non Core CRL	Capital ODEL	Fully Funded by SG
Capital cost of non NPD elements	Core CRL	Capital DEL	Fully Funded by SG as set out in business case
Revenue	Board Budget	SG Budget	Funding Source
Annual Service Payments	Core RRL	Resource DEL	SG will fund all with exception of 50% lifecycle and 100% hard FM

Depreciation of revenue financed assets	Non Core RRL	Resource ODEL	Fully Funded by SG
Depreciation of capital financed assets	Non Core RRL	Resource DEL	Fully Funded by Board
Impairment of revenue financed assets	Non Core RRL	Resource ODEL	Fully Funded by SG
Impairment of non NPD elements	Non Core RRL	Resource DEL/AME	Funded by SG/Board according to normal DEL/AME impairment arrangements

Existing PFI arrangement at Cresswell

- 14.16 The OBC assumed that any amendment to the PFI agreement as a result of the refurbishment work would have no impact on the current treatment. This assumed that the asset would continue to be treated as revenue and not capital.
- 14.17 The commercial workstream for the Cresswell project have been considering this treatment in light of the revised guidance and have highlighted that it may affect this National Accounts treatment due to its scale and depending on the extent to which the commercial terms underlying the Cresswell Project are altered. The workstream includes external advice from Ernst and Young on the area of national accounts classification.
- 14.18 As the assessment is currently underway, this impact will be assessed and brought forward in the Cresswell Full Business Case. The following documents will be used to assess the associated risk:
 - The current version of the European System of Accounts as to be implemented under Regulation 549/v6 of the European Parliament from 1 September 2014 ('ESA 10'); and
 - The European Statistics Agency's ('EUROSTAT') Manual on Government Deficit and Debt issued during August 2014 that contains guidance on implementing ESA 10 ('MGDD').

National Accounts- Current Position

- 14.19 The Project's assets and matching long-term liabilities are currently off balance sheet under ESA 10 for the following reasons:
 - The Operator would be classified to the private sector because:
 - Revenues it earns and which depend on prices reflecting the underlying costs of providing its services would meet all of its operating and financing costs; and
 - All of its voting shares and senior management would be owned and controlled by other private sector entities.
 - The Project includes a high enough level of services to not regarded as a lease. In addition, since the Operator is not expected to earn any revenue directly from the assets' users the Project is not expected to be classed for under ESA 10 as a concession. Finally, the Board or any other Government entity had no part in the funding of the construction of the Project's underlying property. Instead the Project is expected to be treated as a PPP as described in the MGDD.
 - The Project's construction and availability risks have been transferred to the Operator;
 - While the Board retains responsibility for the Project property on the Project's expiry, the Operator's finance is not fully guaranteed if the Project is terminated early due to Operator default; and
 - The arrangements suggest that the Operator's overall funding for and revenues from the Project are expected to be at risk of failure by the Operator to meet its obligations for the Project.

National Accounts- Future Position

- 14.20 If the Cresswell Operator was required to fund the proposed refurbishment and to continue being responsible for maintaining the Cresswell Project property under similar commercial terms to those prior to the refurbishment, the Cresswell Project would currently be expected to remain off balance sheet. This is because the refurbishment would be considered a PPP under ESA 10 and the Cresswell Operator would take the construction risk for that refurbishment as well as its availability risk on its completion.
- 14.21 However if the Board fund the refurbishment, the detailed analysis will assess the possibility that the Cresswell Project would fall on balance sheet under ESA 10 after its completion. This is because the refurbishment may in substance replace the existing private sector asset with one classified to the public sector due to its scale and comprehensive nature. In addition, the Board would be deemed under ESA 10 and the MGDD to be buying the asset additions underlying those works even if after their completion the Operator was required to accept

- most of the availability risk on the refurbished property through the Project payment mechanism.
- 14.22 If the outcome of the assessment is that this would fall on balance sheet the Board would require to obtain additional capital budget from the SGHSCD.

The existing Cresswell building is currently held on the Board accounts at £7m.

Based on 1:200 drawings draft work estimates at 2014/15 prices is £12.8m excluding Dumfries and Galloway fees and equipping costs.

No work has been carried out at this time to assess the Fair Value of asset that would be used to bring on the balance sheet This will be taken forward by the Commercial Workstream now the draft costs have been provided

Conclusion

- 14.23 It is assumed that the new DGH will be on balance sheet for NHS Dumfries and Galloway purposes however off balance sheet for national accounting purposes.
- 14.24 Further work is required on the national accounting impact of Cresswell and this will be included within the separate business case that will be prepared. Given the early stages of the design development the impact on ESA10 will require to be further tested.

15 STATEMENT OF AFFORDABILITY

15.1 NHS Dumfries and Galloway confirm that the financial consequences will be managed as part of their financial and capital plan. The Board has recognised the additional revenue funding commitment of £6.7m as identified at the OBC and agreed to set aside an additional £1m recurring year on year to support the development to accrue recurring funds of £7.8m. This will be increased by a further £0.415m to £8.215m to match the additional recurring revenue costs. The Scottish Government has indicated their commitment to support the non-NPD capital costs and the revised capital expenditure profile will be reflected in the Boards LDP for 2015/16 onwards.

THE MANAGEMENT CASE

16 The Management Case

Purpose

The purpose of this section describes how the Board intends to manage the various phases of the project and sets out the proposed timetable and key milestones.

Summary

NHS Dumfries &Galloway have developed a robust programme management framework outlining the following:-

- Governance structure;
- Project team structure;
- The roles and responsibilities of key members;
- Project and Programme plan including key milestones;
- Key Stage Review; and
- Communications and reporting arrangements.
- 16.1 This section of the FBC addresses the 'achievability' of the project. Its purpose, therefore, is to build on the OBC by setting out in more detail the actions that will be required to ensure the successful delivery of the project in accordance with best practice.

Overview

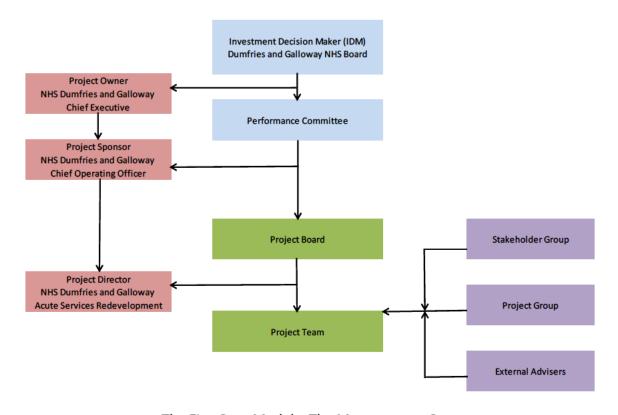
- 16.2 The Board recognises the challenges of bringing this project to a successful completion with the commissioning of the new building and equipment and transfer of Acute Care services into state of the art facilities.
- 16.3 Project organisation within the Board reflects ownership of projects such as this at the highest level and draws upon the expertise within the Board to ensure that the wider business objectives of the organisation are met.

Programme Framework

16.4 The Board is delivering this development as a single project but within the context of the wider Clinical and Service Change Programme.

Programme Roles and Responsibilities

- 16.5 The Board has a successful history in the management and implementation of key projects and will ensure that appropriate project methodologies continue to underpin the management of the project.
- 16.6 The primary objectives of the project organisation are to ensure:-
 - Delivery of the new patient centred service model and associated patient pathways;
 - Effective clinical engagement;
 - Input from an extensive range of stakeholders;
 - · Smooth implementation of the workforce changes;
 - Construction of the building on time to budget and in accordance with the design brief;
 - Effective operational commissioning of the building.
- 16.7 The responsibility for Project Governance lies with the Acute Services Redevelopment Project Board chaired by the Chief Executive (Senior Responsible Officer) of NHS Dumfries and Galloway. The Project Sponsor is the Chief Operating Officer supported by the Project Director. All Executive Board members are key members of the Project Board.



The Five Case Model – The Management Case

16.8	The project structure has been reviewed post OBC to ensure that adequate resources are allocated to the project.
16.9	Within the Board, the project is managed on a day-to-day basis by the Project Team (which includes external advisers). The Team is accountable to the Project Board, which is chaired by the Chief Executive.
16.10	The Team structure has been developed to ensure high levels of engagement with operational staff within the user groups and the Project Board. This is achieved through the application of a matrix structure that utilises a range of operational staff and managers who, whilst remaining within their current management structures, are tasked to work on the Redevelopment Project.

16.11 NHS Dumfries and Galloway Governance Framework

Team or Group	Role and Responsibilities
Dumfries and	It is essential that there is a clearly identified body with responsibility
Galloway NHS	for approving the investment. The NHS Dumfries and Galloway Board
Board - The	will be the Investment Decision Maker (IDM) for the project and as
Investment	part of this will be responsible for deciding what financial and other
Decision Maker	resources to invest in the project. The Board must consider whether
(IDM)	the project fits with the strategic direction that it is developing,
(IDW)	particularly around the use of cottage hospitals.
	The Board also needs to be satisfied that the project is affordable throughout its life. The Board should also be satisfied that the project represents value for money in the context of the available funding. Ultimately, the Board will be accountable for the successful delivery of the project. The Board should ensure that an appropriate governance structure is put in place, and that adequate resources have been deployed including appointing the Project Sponsor. The Board should approve a formal Scheme of Delegation that will allow certain of its responsibilities to be exercised at other levels within the organisation. The Scheme of Delegation has been drawn up for this project and therefore reflects the NPD procurement process and the key decision making points that are required. A vital part of the Board's role as Investment Decision maker, and
	which will not be delegated, will be to approve the selection of the
	Private Sector Partner at the conclusion of the bidding exercise. The
	Private Sector Partner will be responsible for the design (to
	completion), construction, finance, maintenance and life cycle
	replacement of the new hospital building over a period of at least 25
	years.

Team or Group	Role and Responsibilities
Performance Committee	Whilst the NHS Board will be the Investment Decision Maker and as such retain responsibility for the most major decisions, scrutiny that is more detailed will be undertaken by the Board's Performance Committee. The committee will make recommendations to the Board on key issues such as the appointment of a Preferred Bidder and the approval of the Project Agreement. The Scheme of Delegation must make clear what authority is being delegated to the committee.
	This arrangement will also limit the time needed for detailed project scrutiny at NHS Dumfries and Galloway Board meetings and therefore allow the normal business of the Board to continue without the meetings being dominated by discussion about the project. Detailed scrutiny of issues at the Performance Committee should give the full NHS Dumfries and Galloway Board confidence in the progress of the project.
	It is essential that Project Sponsor be represented on the Performance Committee. The chair will be one of the non-executive members of the Board.
	The frequency and timing of Performance Committee meetings would normally be expected to match that of Board meetings. On occasions, however, the procurement timescale of the project will require that meetings are held more frequently and additional meetings are therefore very likely to have to be called at crucial stages in the project and possibly at short notice.
Project Board	The Project Board will take decisions in areas delegated to it through the Scheme of Delegation and will make recommendations to the Board or Board committee, on other issues where it does not have delegated authority.
	The Project Board has a wide range of senior membership from a variety of stakeholders in the new hospital, including management with responsibility for the services and clinicians providing the services.
	Project Board membership has been agreed by the Project Sponsor and includes the Project Director. Some of the stakeholders represented may be external to NHS Dumfries and Galloway such as the local authority, Scottish Government and SFT.
	The Project Board are responsible for reviewing the risk register at regular meetings taking due consideration of the red risks highlighted

Team or Group	Role and Responsibilities		
	along with the proposed mitigating actions.		
	The Project Director brings a high-level report on project progress to each meeting. This report will clearly identify issues where decisions are required and those issues that are delaying progress on the project.		
	The Project Board must ensure that the role of external advisers is clear and that their involvement in the project is appropriate and complementary to that of the Board's own staff resources and that their involvement does not result in them taking on a leadership role.		
	The remit of the Project Board covers the entire range of issues that will need to be addressed in the project.		
	The Project Board is chaired by the Project Owner and meets monthly with meetings that are more frequent where required.		

16.12 NPD (Project Co) and Project Team Structure

Individual	Role and Responsibilities
Public Interest	The public interest is represented in the governance of the NPD
Director	structure, which increases transparency and accountability and
(see Chapter 9)	facilitates a more pro-active and stable partnership between public and private sector parties.
	 Monitoring the Project Company's compliance with the core NPD principles
	 Bringing an independent and broad view to the Project Company's board
	 Monitoring conflict of interest situations and managing board decisions where there is a conflict of interest for the other directors
	 Reviewing opportunities for, and instigating, refinancing
	 Reviewing opportunities for, and instigating, opportunities for realising cost efficiencies and other improvements in the Project Company's performance (on the basis that in the absence of equity return there is a potential lack of incentive
	for the other directors to explore or promote these).
	It is anticipated that SFT will nominate a Public Interest Director for
	each NPD project.

Individual	Role and Responsibilities
Authority Observer (see Chapter 9)	The Board will be entitled to appoint an "Observer" to attend and participate (but not vote) at the Project Company's board meetings. The Observer role has been a feature of traditional PFI/PPP projects in Scotland to date and is retained in the NPD model.
Project Owner	The Project Owner represents the NHS Dumfries and Galloway Board and has responsibility at a strategic level for the successful delivery of the project. The Project Owner may need to have delegated authority in some areas. The Project Sponsor provides direction and strategic leadership for the project and as such is accountable to the NHS Dumfries and Galloway Board.
	The Project Owner's involvement in the project, whilst not on a full time basis, should not be split or shared amongst a number of individuals. There must be no ambiguity about who is fulfilling the role of Project Owner.
	The Project Owner will ensure that the Board receives regular reports on project progress and is alerted to issues that risk blowing the project off course. The Project Owner is responsible for alerting the Board if the project is likely to be delayed or has other major difficulties, such as additional demands on NHS Dumfries and Galloway finance. The Project Owner will also chair the Project board.
	Notwithstanding the involvement of others at a senior level in the project, the Project Owner retains personal responsibility for the success of the project.
	It is the responsibility of the Project Owner to appoint a suitably senior and named individual as Project Sponsor.
	Owing to the project's magnitude and scale, the Board's Chief Executive has been identified as the Project Owner for the project.
Project Sponsor	Recognising the scale and complexity of this project it requires a Project Sponsor, who is appointed by and reports direct to the Project Owner. The Project Sponsor must be able to provide more direct input to the project than can be expected of the Project Owner and should ensure that the project is sufficiently resourced.
	Although the input of the Project Sponsor will sometimes be on a part time basis, an important responsibility of the Project Sponsor will be to provide support to the Project Director.
	It is not necessary for the Project Sponsor to be technically qualified, as

Individual	Role and Responsibilities
	they will be supported by a Project Director working full time on the project with in depth knowledge of the NPD and wider procurement issues. The Project Sponsor role should not be split or shared between individuals.
	The Board's Chief Operating Officer has been identified as the Project Sponsor.
Project Director	Appointed by the Project Sponsor this is a full time role with a considerable degree of authority and responsibility for driving the project forward on a day-to-day basis by providing the project with visible leadership.
	In light of the proposed procurement arrangements for the project the Project Director must have experience of procuring revenue funded projects i.e. PPP/PFI/NPD. It is very important that NPD skills are not provided exclusively by advisers.
	The Project Director is the senior individual working on the project on a full time basis and must have adequate support from a team of individuals working on the project on either a full-time or part-time basis.
	The Project Director brings reports on project progress and issues requiring decision to the Project Board.
Commissioning Manager	To lead and co-ordinate the transition of services into the new hospital in conjunction with Project Co
	As part of the overall Programme a commissioning plan is being developed, the transition plan for workforce moving to the new hospital will be incorporated into this and supported by the Project team.
	Work is ongoing to identify the extent to which equipment will transfer to the new facility and to quantify the cost associated with procuring the balance. The equipment procurement and management will feature as part of the commissioning strategy and implementation phase.
Contract Manager	To ensure that expenditure is effective and efficient and that a productive relationship is maintained with Project Co. Ensure that contract monitoring is efficiently carried out and that all service parameters are being delivered
	This role is endorsed by SFT and described in SCIM Guidance

Project Plan

Milestone	Date
Approval of FBC by NHS Board	1 December 2014
Submission of FBC to SGHSCD CIG	18 November 2014
Approval of FBC by the SGHSCD CIG	16 December 2014
Construction Commence (mobilisation)	23 th January 2015
Construction Complete	July 2017
Commence Post Project/Post Occupancy Evaluation	December 2018

Communication and Reporting Arrangements

- 16.13 Public consultations were carried out in 2011 and 2012.
- 16.14 In parallel with these formal processes, the Board has pursued an active internal and external communications process to provide information to staff and patients about the scheme as it has progressed.
- 16.15 The purpose of the communication plan is multi faceted and is designed to ensure that all stakeholders are informed and engaged, are aware of the status of the development and encourage wider community involvement. The communication plan is a dynamic document and is subject to review on a regular basis and communication initiatives are linked with the stages of the project.

Key Stage Review

- 16.16 As part of the governance process for NPD projects, there is a requirement to participate in SFT Key Stage Reviews (KSRs) at specific stages up to Financial Close.
- 16.17 All KSR reviews are detailed below:
 - Issue of OJEU Notice 26th June 2013;
 - KSR (Pre-Close of Dialogue) May 2014; and
 - A follow up review on the Pre-preferred bidder appointment September 2014 and this KSR Report is available in Appendix 7.
- 16.18 Following submission of the FBC to the SGSCHD Capital Investment Group (CIG) a final KSR (Pre- Financial Close) will be required in advance of Financial Close.

- 16.19 This section of the FBC demonstrates that NHS Dumfries & Galloway have developed a robust programme management framework outlining the following:-
 - Governance structure;
 - Project team structure;
 - The roles and responsibilities of key members;
 - Project and Programme plan including key milestones;
 - Key Stage Review; and
 - Communications and reporting arrangements.

17 Change Management

Purpose

The purpose of this section is to restate the Board's change management principles and to outline in brief terms the approach to change within the Project.

Summary

Formal Change Management processes are in place for the wider Board approach to change and recognised processes are in place to manage change arising in the Project.

Change Management Philosophy

- 17.1 The Board's change management philosophy is to:
 - Recognise the significance of the change
 - Take the opportunity to improve the quality of healthcare
 - Implement the change in a structured and well managed way

Change management principles

- 17.2 The Board has developed a series of principles that will underpin the change process.
- 17.3 The principles established are to:
 - Recognise the need to maximise the benefits of the change for patients, who are at the heart of the changes made;
 - Take advantage of the time available to complete the new build to start the change process and thereby avoid risks related to a 'big bang' approach;
 - Test and prove the changes through careful piloting of any aspects of the new models and processes that can be implemented before the new facility is finally commissioned;
 - The change management philosophy and principles will be communicated to all staff;
 - Work in partnership with staff and other stakeholders both within and outside the hospital to engage all those involved in the delivery of care in the change process;

- Focus on staff skills and development required so staff are both capable and empowered to deliver healthcare effectively and to a high quality standard in the new facility through new models of care.
- 17.4 The Board has a change management approach in place that encompasses the philosophy and principles above. Progress had already been made in delivering the core change management plan to ensure the wider programme benefits are achieved.

Changes arising in the Project

- 17.5 During the Procurement phase pre-financial close changes to Project Co's final tender, by Project Co or being managed through the Project Team and, if there are costs that will impact on this FBC, escalated to the Project Board for agreement.
- 17.6 In the Construction and commissioning phase, the change protocol in the Project Agreement governs the management of changes post Financial Close.
- 17.7 During the Operational phase, the service provided by Project Co is enshrined in the Project Agreement. Day to day matters, performance delivery issues and the management and control of change will be through the NHS Dumfries & Galloway Contract Manager role.
- 17.8 This project represents a significant change for NHS Dumfries & Galloway. The change to the physical infrastructure is simply an enabler to a more fundamental change in the way that healthcare will be delivered for the population served by NHS Dumfries & Galloway.
- 17.9 The impact of the change to workforce, facilities and the model of care will be considerable, and the clinical and service change programme will manage this change agenda.

Conclusion

17.10 Formal Change Management processes are in place both for the wider Board approach to change and recognised processes are in place to manage change arising in the Project.

18 Benefits Realisation Plan

Purpose

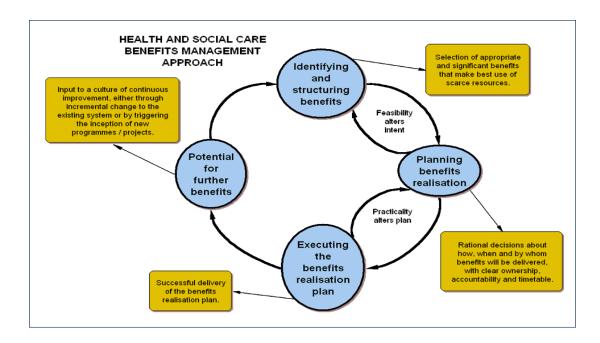
A Benefits Realisation Plan outline was developed for the OBC. This section reviews the process undertaken in order to achieve the outcomes and includes the associated SMART measures.

Summary

A more detailed BRP has been further developed from the OBC version and will continue to be refined as the Project progresses.

Overview

- 18.1 Benefits management is the overarching process that incorporates the Benefits Realisation Plan (BRP) as part of a process of continuous improvement. It takes due account of changes in the project during the delivery phase which impact on, or alter the anticipated benefits.
- 18.2 As such, the benefits management approach is a cycle of selection, planning, execution and review as illustrated below.



- 18.3 The BRP provides the means by which the Board will ensure that the potential benefits arising from the Acute Services Redevelopment Project are realised and will demonstrate that the investment has been worthwhile to key stakeholders.
- 18.4 An updated benefits realisation plan has been developed. Achievement of the benefits will be assessed as part of a structured approach to Post Project Evaluation. Post Project Evaluation will comprise a review of achievement of the Project's Objective, after completion of Financial Close and construction and two years into the operational phase.
- 18.5 As part of the further development of BRP, the Board will agree baseline measures reflecting the status of each benefit area and the timeline for attaining the anticipated full realisation of the benefits.
- 18.6 This will also be linked to the change management plan to provide assurance on delivery.
- 18.7 Further work has been undertaken to identify the range of benefits that will result from the project. These are highlighted below and further developed during the BRP process.

Objective	Key Benefits
Provision of high quality Clinical	Improved Patient satisfaction
Care	Improved outcomes for patients – right
	treatment, right time, right service
Closer Integration of Healthcare	Increased clinical efficiency
Services	Achievement of quality targets
	Improved access to services – primary and secondary care
	Reduced travel distances for patients and staff
	Less duplication
	Improved teaching and shared learning
	Co-location – physically and mentally
Modernisation of Services and	Improved environment
Facilities	Improved privacy and dignity
	Improved patient satisfaction
	Improved staff satisfaction and
	recruitment and retention
	Reduction in violence and aggression
	Improved Patient Experience
	Capacity of right type and scale to cope with demand

The Five Case Model – The Management Case

Improved Service Models and	Less duplication
Patient Pathways	Achievement of quality targets
	Single access/one stop shop
	Earlier intervention
	Definitive care plan before patient leaves
	CAU
Workforce Re-profiling	Flexibility of workforce
	Improved skill mix
	Improved outcomes for patients
	Availability of senior decision makers
	earlier in the process
	24/7 cover provided by appropriate
	clinicians
Flexibility to respond to change	Increased capacity
	Flexibility of capacity
	Improved adjacencies with
	dependent/related services
Financial sustainability of service	Value for money
and project	Affordable
Maximisation of Technology to support Service	Improved diagnostics and reporting
Model	Improved monitoring
	Reduced admissions
Energy efficient/low carbon	Improved quality, condition and
buildings	functional suitability of estate
-	Energy and carbon reduction targets
	achieved
	Lower energy costs/ m2

18.8 A more detailed BRP, further developed from the OBC version, and attached as appendix 8, will continue to be refined as the Project progresses.

19 Risk Management Plan

Purpose

The purpose of this section is summarise NHS Dumfries & Galloway's approach to Risk Management

Summary

This FBC sets out Dumfries & Galloway's approach to the management of risks associated with the project incorporating:

- Risk management philosophy;
- Risk identification and assessment;
- The approach to risk management.

The Project Board review risk management by on a bi-monthly basis.

Overview

- 19.1 The process of risk analysis for the FBC followed four steps:
 - Risk identification developing a Risk Register covering key risk areas and individual risks within these areas;
 - Risk assessment estimating the probability and timing of each risk occurring and the impact if it should occur;
 - Risk quantification putting a value to each of the risks, using the estimates of probability, impact and timing;
 - Risk management developing a plan to manage all the risks identified in the risk register for the preferred option, including responsible persons and monitoring mechanism.
- 19.2 This section of the FBC sets out Dumfries and Galloway's approach to the management of risks associated with the project incorporating:
 - Risk management philosophy;
 - Risk identification and quantification;
 - The approach to risk management.

Risk management philosophy

- 19.3 The Board's philosophy for managing risks considers effective risk management to be a positive way of achieving the project's wider aims, rather than a mechanistic exercise, to comply with guidance. Inadequate risk management would reduce the potential benefits to be gained from the project.
- 19.4 The Board recognises the value of an effective risk management framework to systematically identify, actively manage and minimise the impact of risk. This is done by:
 - Having strong decision making processes supported by a clear and effective framework of risk analysis and evaluation;
 - Identifying possible risks before they crystallise and putting processes in place to minimise the likelihood of them materialising with adverse effects on the project;
 - Putting in place robust processes to monitor risks and report on the impact of planned mitigating actions;
 - Implement the right level of control to address the adverse consequences of the risks if they materialise.

Risk identification and quantification

- 19.5 Risk workshops are held involving members of the Project Team, the external advisers as well as a cross section of NHS Dumfries and Galloway staff.
- 19.6 The initial activities focused on establishing a range of project risks reflecting the scope of the project as well as the likely procurement route. Primary risks were identified across a range of categories incorporating:
 - Clinical risks;
 - Contractual risks;
 - Design risks;
 - Enabling works risks;
 - Equipping risks;
 - FM risks;
 - Land acquisition risks;
 - Legal risks;
 - Procurement risks;
 - Project management risks.

- 19.7 These risks were further allocated across a range of categories depending on where these risks would apply within the overall structure of the project. These include:
 - The phase of the project to which they apply;
 - Those that would have a major impact on the cost of the project;
 - The ownership of the risks including those, which can be transferred to the NPD contractor.
- 19.8 Each risk has subsequently been assessed for its probability and impact, and where relevant its expected value.
- 19.9 The risk register is maintained as a dynamic document and updated at key milestones or as the need arises with the risk profile for the project kept under constant review. The top risks are reported to the Project Board on a bi-monthly basis and to the Audit Committee every 6 months.
- 19.10 A copy of the full Risk Register is provided at Appendix 11.

Risk management

- 19.11 The risk register incorporates details of risk owners and appropriate counter measures to manage the Board's exposure to the risks and this will be maintained and updated throughout the procurement process.
- 19.12 A risk sub-group has been established with responsibility for the management of the risk process including ongoing assessment and quantification of risks. The group also review and develop the management strategies associated with the risks. This group will comprise members of the Project Team as well as the Board's Technical and Financial Advisors.

Risk Management Philosophy

- 19.13 The risk register is discussed in detail at the bi-monthly meeting of the Project Team that identifies, manages and records risks, providing assurance to the Project Board. The Project Board meets monthly and its role is in ensuring the project remains viable through identification and active management of risks; raising areas of concern with the main Board where necessary.
- 19.14 A full quantitative and qualitative risk analysis was undertaken as part of the preparation of the OBC, and standard practice is to roll that forward and add

new risks identified and arising, and to assess the transferability of risk under the NPD option.

19.15 The risk register has been reviewed bi-monthly by the Project Board.

Conclusion

- 19.16 This FBC sets out Dumfries & Galloway's approach to the management of risks associated with the project incorporating:
 - Risk management philosophy;
 - Risk identification and assessment;
 - The approach to risk management.

20 Contract Management Arrangements and Plan

Purpose

This section sets out NHS Dumfries and Galloway Contract Management Philosophy; and Roles and responsibilities.

Summary

NHS Dumfries & Galloway have a robust contract management approach with clear governance arrangements in place.

Overview

- 20.1 Project management arrangements are in place to ensure that:-
 - The Project is implemented successfully with the minimum of adverse impact on NHS D&G and the local health economy;
 - The health system elements of the Project are delivered effectively, on time and to cost without delay;
 - The value of the Project is maximised not only in terms of effective use of resources and meeting user needs; but also in regeneration of the local economy and providing health facilities of which the Dumfries and Galloway population can justifiably be proud.

Contract Management Philosophy

- 20.2 The primary aim of contract management is to ensure that the needs of the project are satisfied and that the NHS Dumfries and Galloway Board receives the service it is paying for, within the boundaries of the Contract whilst achieving value for money. This means optimising efficiency, effectiveness and economy of the service or relationship described in the contract, balancing costs against risks and actively managing the client contractor relationship.
- 20.3 The contract management for this project is based on collaborative working and joint decision-making. Whilst the NHS Dumfries and Galloway Board is the Client and as such responsible for setting and agreeing the scheme objectives, the partnership approach enjoys the benefit of the Client and Project Co working together to resolve problems and objectively develop the best Value For Money (VFM) solutions.

- 20.4 Contract Management also involves recognising the balance of the roles and responsibilities as defined within the contract and aiming for continuous improvement over the life of the Project.
- 20.5 The Board's contract management will:
 - Maximise the chances of contractual performance in accordance with the contract requirements by providing continuous and robust contract management which supports both parties;
 - Optimise the performance of the project;
 - Support continuous development, quality improvement and innovation throughout the Project;
 - Ensure delivery of best Value for Money;
 - Provide effective management of commercial risk;
 - Provide an approach that is open to scrutiny and audit;
 - Support the development of effective working relationships between both parties;
 - Allow flexibility to respond to changing requirements;
 - Demonstrate clear roles, responsibilities and lines of accountability; and
 - Ensure that all works and services comply with the Authority's Requirements, current legislation, relevant changes in Law and Health and Safety requirements, and NHS Scotland policies and procedures.

Roles and responsibilities

- 20.6 The governance structure outlined within 16.7 has been utilised for all stages of this contract and will continue into Construction and Handover, providing a clear and concise process for the flow of information and identifiable organisational governance arrangements within NHS Dumfries and Galloway.
- 20.7 The Board Project Director is accountable for the delivery of the Project to meet the strategic and business needs of the NHS Dumfries and Galloway Board. The Board Project Director reports to the Project Board.
- 20.8 The contract has a role for the "Authority's Representative". The Project Director will represent NHS Dumfries and Galloway and will be the formal point of contact for Project Co in terms of formal contract notices, requests for changes etc.
- The contract also has a role for an "Authority Observer". This is an individual, nominated by SFT, who will be invited to attend all board meetings of the NPD Company, for the purposes of observing proceedings and reviewing papers (although will not act as a director and will have no decision-making role).

- 20.10 The Board have set up the governance structure, established the user groups, provided supporting information for the business case, and coordinated submission of papers to the relevant governance committees of NHS Dumfries and Galloway.
- 20.11 The membership the Project Board is outlined in Appendix 9.
- 20.12 The Project Board meetings are held monthly.

20.13 NHS Dumfries & Galloway have a robust contract management approach with clear governance arrangements in place.

21 Arrangements for Post Project Evaluation

Purpose

It is recognised good practise that large projects are subject to a post project evaluation. The detailed requirements are set out in the Scottish Capital Investment Manual.

The Scottish Government Health and Social Care Directorate will not approve the Full Business Case unless the Post Project Evaluation is properly planned and forms part of the project programme.

Summary

Planning is well underway to complete appropriate post project evaluation process following best practice and an outline plan has been developed.

The requirement for Post-Project Evaluation (PPE)

- 21.1 The requirement for PPE is recognised as good practice and is mandatory within NHS Scotland for projects of this size and complexity.
- 21.2 PPE is an essential aid to improving project performance, achieving best value for money, improving decision making and learning lessons for the corporate benefit of NHS Scotland.
- 21.3 The aim of PPE is to determine whether the original objectives set by the project have been achieved. It involves the consideration of the economy, effectiveness and efficiency of the project.
- 21.4 The Board is committed to ensuring that a thorough and robust PPE is undertaken to ensure positive lessons are learnt.

Framework for Post-Project Evaluation

- 21.5 It is normal and considered good practice to evaluate performance continuously throughout the life of the project however, guidance recommends that there should be 4 main checkpoints or stages.
- 21.6 The key stages applicable for this project are set out in the table below:

The Five Case Model – The Management Case

Stage	Evaluation undertaken	When undertaken
1	Plan and cost the scope of the PPE work at the project appraisal stage. This should be summarised in an Evaluation Plan.	Plan at OBC, fully costed at FBC stage
2	Monitor progress and evaluate the project outputs	On completion of the facility
3	Initial post-project evaluation of the service outcomes	Six months after the facility has been commissioned
4	Follow-up post-project evaluation (or post occupancy evaluation - POE) to assess longer-term service outcomes after the facility has been commissioned. Beyond this period, outcomes should continue to be monitored. It may be appropriate to draw on this monitoring information to undertake further evaluation after each market testing or benchmarking exercise	facilities have been

- 21.7 The PPE will be undertaken by a team constituted with a remit to deliver the PPE report to the timescales indicated in the key stages noted above.
- 21.8 Within each stage, the following issues will be considered:
 - The extent to which relevant project objectives have been achieved
 - The extent to which the has progressed against plan
 - Where the plan was not followed, what were the reasons
 - Where relevant how plans for the future projects should be adjusted
- 21.9 The Project Owner will be responsible for ensuring that the arrangements have all been put in place and that the requirements for PPE are fully delivered.
- 21.10 The Project Director will be responsible for day-to-day oversight of the PPE process, reporting to the Project Owner and Project Board.

- 21.11 The Project Owner and the Project Director will set up an Evaluation Steering Group (ESG), which will:
 - Represent interests of all relevant stakeholders;
 - Have access to, professional advisers who have appropriate expertise for advising on all aspects of the project.
- 21.12 The Project Manager will coordinate and oversee the evaluation. The key principle is that the evaluation is objective.
- 21.13 The Evaluation Team will be multi-disciplinary and include the following professional groups, although the list is not exhaustive:
 - Clinicians, including consultants, nursing staff, clinical support staff and Allied Health Professionals;
 - Healthcare Planners, Estates professionals and other specialists that have an expertise of similar facilities;
 - Accountants and finance specialists, IM&T professionals, plus representatives from any other relevant technical or professional grouping;
 - Patients and/or representatives from patient and public groups.
- 21.14 At each of these stages, evaluation will focus on different issues. In the early stages, the emphasis will be on formative issues. In the later stages, the focus will be on summative or outcome issues. These are further described in the table below:

Formative Evaluation - As the name implies, is evaluation that is carried out during the early stages of the project before implementation has been completed. It focuses on 'process' issues such as decision making surrounding the planning of the project, the development of the business case, the management of the procurement process, how the project was implemented, and progress towards achieving the project objectives; and

Summative Evaluation - The focus of this type of evaluation is on outcome issues. It is carried out during the operational phase of the project. Summative evaluation builds on the work done at the formative stage. It addresses issues such as the extent to which the project has achieved its objectives; how out-turn costs, benefits, and risks compare against the estimates in the original business case; the impact of the project on patients and other intended beneficiaries; and lessons learned from developing and implementing the project.

- 21.15 The report that will be submitted to NHSD&G and onward to the Scottish Government will be written to address, as far as possible, the following issues:
 - Were the project objectives achieved;
 - Was the project completed on time, within budget, and according to the specification;
 - Are users, patients and other stakeholders satisfied with the project results;
 - Were the business case forecasts/success criteria achieved;
 - Overall success of the project taking into account all the success criteria and performance indicators, was the project a success?
 - Organisation and implementation of the project did the Board adopt the right processes? In retrospect, could the project have been organised and implemented better?
 - What lessons were learned about the way the project was developed and implemented?
 - What went well? What did not go according to plan?
 - Project Team recommendations record lessons and insights for posterity.
 These may include, for example, changes in procurement practice, delivery, or the continuation, modification or replacement of the project.
- 21.16 An outline Evaluation Plan is attached at Appendix 10.

21.17 Planning is well underway to complete appropriate post project evaluation process following best practice and an outline plan has been developed.

CONCLUSION

- 22.1 This FBC has outlined the strong case for change and investment in healthcare facilities within Dumfries and Galloway. It has also shown a solution that provides all of the benefits identified at a value for money price.
- 22.2 In partnership with Project Co, the NHS Board proposes that the investment in facilities will meet the Project objectives of:
 - Clinical Allowing delivery of modern health services to an acceptable standard;
 - Configuration Overcoming inherent clinical inefficiencies caused by configuration of estate that are perpetuating bad clinical practices e.g. split and cramped facilities, frequent patient transfers;
 - Workforce Removing barriers to allow modern working practices to be adopted;
 - Estate Providing a new hospital to avoid investment of c£200m in old decaying buildings and reduce backlog maintenance;
 - Privacy and Dignity the introduction of en-suite single rooms that are more aligned to patient expectations in the 21st century.
- 22.3 The Full Business Case is recommended for approval.

Phase	Date
Detailed Planning Consent	16 th December 2014
Financial Close	23 rd January 2015
New Hospital Works Commence	End Jan 2015
Hospital Complete and Handover	July 2017
First patient	Late Autumn 2017

GLOSSARY

Twenty four hours a day seven days a week
Accident and Emergency
Annual Development Review
Achieving Excellence – Design Evaluation Toolkit
Allied Health Professional
Advanced Nurse Practitioner
Admission on Day of Surgery
Accounting Standards Board
Average Length of Stay
British Association of Day Surgery
Board's Construction Requirements
Building Environment Assessment Methodology
Building Research Establishment Environmental Assessment Method
Benefits Realisation Plan
Civil Aviation Authority
Combined Assessment Unit
Closed-circuit television
Critical Care Unit
Competitive Dialogue
Construction (Design and Management) Regulations
Construction (Design and Management) Regulations Chief Executive Letter
Chief Executive Letter
Chief Executive Letter Conditions for Success

Council	Dumfries and Galloway Council
СОЅНН	Control of Substances Hazardous to Health
CRES	Cash Releasing Efficiency Savings
CRL	Capital Resource Limit
CSSD	Central Sterile Supplies Department
СТ	Computed Tomography
DoE	Department of the Environment
DDA	Disability Discrimination Act 2005
DDI	Direct Dial In
DFL	Dumfries Facilities Limited
DGH	District General Hospital
DGRI	Dumfries and Galloway Royal Infirmary
DNA	Did Not Attend
ECC	Emergency Care Centre
ED	Emergency Department
EMS	Environmental Management System
EPC	Energy Performance Certificate
ETT	Exercise Tolerance Testing
EU ETS	European Union Emission Trading System
EWTD	European Working Time Directive
FBC	Full Business Case
FM	Facilities Management
FRS	Financial Reporting Standard
FY1	Foundation Year 1 (Doctor Training)
FY2	Foundation Year 2 (Doctor Training)

GP	General Practitioner
GROS	General Registrars of Scotland
HAI	Healthcare Associated Infection
HBN	Health Building Notes
HDL	Health Department Letter
HDU	High Dependency Unit
HEAT	Health, Efficiency Access and Treatment
HFN	Health Facilities Notes
HFS	Health Facilities Scotland
HGN	Health Guidance Notes
HSE	Health and Safety Executive
нтм	Health Technical Memoranda
HVAC	Heating Ventilation and Air Conditioning
HWS	Hot Water Supply
IA	Initial Agreement
ICU	Intensive Care Unit
IFRS	International Financial Reporting Standards
IM	Information Memorandum
IM&T	Information Management and Technology
ISD	Information Services Division (of Scottish Government)
IT	Information Technology
ITPD	Invitation to Participate in Dialogue
KPI	Key Performance Indicator
LAN	Local Area Network
LDP	Local Development Plan

Length of Stay
Loss Prevention Standard
Medical Assessment Unit
Management Executive Letter (now known as Chief Executive Letter CEL)
Modified Early Warning System
Magnetic Resonance Imaging
NHS Environmental Assessment Tool
National House Building Council
NHS Dumfries and Galloway
National Health Service Information Authority
Net Present Cost
Non Profit Distributing
Net Present Value
Outline Business Case
Office Communicator System
Organisational Development
Official Journal of the European Union
Out of Hours
Outpatient Department
Public Address system
Property and Asset Management Strategy
Private Branch Exchange
Private Finance Imitative
Prior Information Notice
Post Project Evaluation

PPM	Planned Preventative Maintenance
PPP	Public Private Partnership
PQQ	Pre-Qualification Questionnaire
PYF	Putting You First
QIS	Quality Improvement Scotland
RDD	Reviewable Design Data
RDS	Room Data Sheets
RPI	Retail Price Index
RRL	Revenue Resource Limit
RTT	Referral to Treatment
SoA	Schedule of Accommodation
SbD	Secured by Design
SCIEH	Scottish Centre for Infection and Environmental Health
SCIM	Scottish Government Capital Investment Manual
SEPA	Scottish Environment Protection Agency
SFPN	Scottish Fire Practice Notes
SFT	Scottish Futures Trust
SGHD	Scottish Government Health Directorate
SHFN	Scottish Health Facilities Notes
SHGN	Scottish Health Guidance Notes
SHPN	Scottish Health Planning Notes
SHS	Scottish Healthcare Supplies
SHTM	Scottish Health Technical Memorandum
SHTN	Scottish Hospital Technical Notes
SMART	Specific, Measurable, Achievable, Realistic, Timely

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APPENDICES