Pan-Glasgow Decontamination Service

The NHS Board is asked to:

1. note the requirement to comply in full with the new national quality and technical standards for the provision of decontamination services within agreed timescales

2. approve the proposal to achieve full compliance through the development of a Pan-Glasgow Decontamination Service centralised within an NHS-managed Industrial Unit located at Cowlairs in the North East of the city.

3. endorse the signing of the lease for the Industrial Unit at Cowlairs for an initial period of 23 years.

Introduction

The NHS Board is asked to give its approval to the development of a fully compliant, decontamination service centralised within a single industrial unit. This unit will process the decontamination activity for the Yorkhill, South and North Divisions (with the exception of the Dental Hospital which is looking at various options including local decontamination provision).

Background

As members will recall an Outline Business Case detailing the preferred option to achieve the new quality and technical standards was approved by the NHS Board at its November 2003 meeting and by the Scottish Executive at the November 2003 Capital Investment Group meeting.

None of the 6 Decontamination Units (TSSU) serving Glasgow’s Acute Divisions are capable of upgrade to comply with the full new national quality and technical standards as recommended by the Glennie Group Report (2001) and Medicines and Healthcare Products Regulatory Agency (MHRA). The status quo is therefore not an option.

As stated, the preferred option is the centralisation of the service within an NHS-managed, converted Industrial Unit. A suitable Industrial Unit has been located at Cowlairs in the North East of the city. The Board is to lease the premises for a minimum period of 23 years at a favourable annual rental of £108k. Further details are under the section “Description of the Preferred Option”.

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a) **Project Complexity and New Developmental Work**

Once complete, the Pan-Glasgow decontamination Unit will be one of the largest in the UK and offers financial advantages over any other option.

This project is a new development for the NHS and, as such, there has been significant input from advisers, both Scottish Healthcare Supplies (SHS) and the Scottish Centre For Infection and Environmental Health (SCIEH) adviser with regard to process flows, design layout of the new unit and equipment requirements.

b) **Sharing of Methodology**

The pioneering developmental work undertaken in the design of this project, including design documents, room data sheets and technical specifications associated with plant and design and washer disinfecter equipment, is being presented in a formal package to officers within the NHS Estates Property and Environmental Forum. The information will be used to revise, update and issue new formal guidance documents for general use and for consolidation by others within NHS Scotland. It will also form the core of the ‘building’ section of the Post Project Evaluation Report.

c) **Timetable and Key Milestones**

The national timetable to achieve full compliance was March 2004. Given the size and complexity of the Glasgow decontamination project a request to extend the deadline was granted by the Scottish Executive. The anticipated date of project completion, with all 6 sites fully compliant, is December 2006. This is described in more detail below.

The work completed to date on the project is listed below.

- Outline Business Case approval – NHS Board and Scottish Executive Capital Investment Group - November 2003
- Building Design stage 1 approved by the Decontamination Technical Advisory Panel (DTAP) - December 2003
- Stage 2 Design completed – January 2004
- Tender Returns received for enabling works (Roofing/Cladding) - February 2004
- Main works tender documents issued 6 February 2004, returned 12 March 2004
- Building Warrant submitted – January 2004
- Formal notification submitted to H&S Exec – January 2004
- Planning Permission granted on 24 February 2004

It is anticipated that the building conversion works can be completed with equipment installed and commissioned between February and March 2005. The transfer of the existing decontamination services into the new Cowlairs Unit will commence in April/May 2005 with completion by December 2006.

### Description of the Preferred Option

#### a) Summary of Project

A suitable facility for the preferred option has been located at Cowlairs Industrial Estate, which lies in the North East of the City, close to the motorway and main transport routes. The building has a large footprint (50,000 sq ft), which is key in meeting the design needs of the new Decontamination Unit capable of processing the decontamination service requirement of Glasgow Acute Hospitals.
Greater Glasgow NHS Board is to lease the premises for a minimum period of 23 years at an annual rental of £108K. This equates to a cost per square foot of £2.00 (before VAT), which compares favourably to the usual market rental of £4 per sq ft for a property of this type. It should be noted that there will be an initial period of reduced rental. The lease is re-negotiable at pre-determined intervals. The Property Adviser and NHS Scotland Central Legal Office have been fully involved in the negotiation of the lease agreement and are satisfied in the process, which adheres to the guidance given in the Property Transaction Handbook.

The indicative cost of the conversion of the premises is £8.9m; this is composed of building works (£6.2m) and equipment (£2.7m). The total revenue impact of the preferred option is £5.4m, which represents an increase of £1.9m to the existing recurring revenue costs at 2003/04 pay and prices. It should be noted however that £0.5m of current costs relate to un-funded “outsourcing” at both Yorkhill NHS Trust and a lesser amount at Glasgow Royal Infirmary. Therefore, the additional sum required to fund this project is £2.4m.

It should also be noted that these figures do not include the transitional costs, in particular the one-off capital required to purchase theatre instrumentation to support an off-site service. A previous exercise undertaken to assess instrument need estimated a funding requirement of £3m. A more detailed programme of work is being undertaken to validate and refine the additional requirement taking into account the planned turnaround time, operational and collection and distribution arrangements. A theatre instrumentation cost of £3m along with existing equipment write off costs (£780K), and other transitional costs which are mainly training (£440K), will result in total transitional costs of £4.393m over the 4 financial years of implementation of the project.

b) **Energy Usage and Green Issues**

The Project Team have involved the Carbon Trust at all stages of the building and engineering design, the procurement of plant and equipment and the day-to-day running of the facility. The Carbon Trust, through the Building Research Establishment (BRE) have been fully engaged with the Pan-Glasgow Project Management Team to evaluate and give recommendations for minimising energy use, carbon emission and waste production for the new Unit. This will curtail revenue cost increases and, more specifically, reduce the effect of the soon-to-be introduced Carbon tax. This work is being carried out in association with the NHS Estates Property and Environment Forum and will feature as part of a pilot study for other schemes within NHS Scotland.

c) **Contingency Planning**

It should be noted that the equipment requirements have been developed allowing sufficient spare capacity for a machine (washer and/or steriliser ) to be inoperable at any one time due to maintenance or breakdown.

The design of the facility itself incorporates both a dual fuel system with a stand by alternative supply of water, gas and electricity and, in addition, all critical services will have 2 utility supplies including the IT system. This will mean that the facility will be able to cope with an internal or external utility supply failure.

The risk of total failure of the facility is minimal however mutually beneficial contingency plans are being drawn up with a number of TSSUs outwith Glasgow. Within Scotland, the Pan-Glasgow TSSU Manager is a member of the SCIEH controlled "Community of Interest Group" whose first task is to plan Scotland-wide contingency support for Sterile Services Department.

**Developments Since OBC submission**

The main developments since the Outline Business Case (OBC) submission are an enforced review of equipment requirements and further developmental design work. The following describes both in turn.
EMBARGOED UNTIL MEETING

(a) **Equipment Review**

Capacity throughput calculations undertaken by the newly-appointed Glasgow TSSU Manager, validated by SHS, revealed that the national advice given regarding washer equipment appears to underestimate requirements. The nationally accepted formula provided and adhered to at OBC makes provision for instruments but does not take into account tray bases or accessories. As a result washer disinfector equipment for the Glasgow Unit has had to be increased by 30% with significant impact upon the building design, plant requirements and associated running costs.

SHS have confirmed that the planned 8 pass-through sterilisers, included in the OBC, are sufficient for the required throughput.

(b) **Further Developmental Design Work - Revised Design Parameters**

The indicative costs given in the OBC were based upon Stage 1 Design work for which the planning note was used as guidance. Detailed work to develop Stage 2 of the design has highlighted that additional accommodation is required to meet full compliance which is not reflected in the planning note. The introduction of BS EN ISO 13485 has now required additional accommodation for staff training facilities, quality control for technical staff and IT scanning requirements to satisfy instrument tracking and data recording. These requirements supersede the current HPN Design Guidance. Glasgow is keen to use the training facilities as an opportunity to develop a national training facility for Scotland and beyond.

As a result of the increased need for equipment and additional accommodation there has been a need to revisit the design layout and engineering services Consequently there has been an impact upon the cost of the project as described below. These costs have been incorporated into the Full Business Case (FBC).

c) **A summary of the Economic and Financial Appraisal of the Project**

Compared to the OBC, capital costs in the FBC have increased by £2.15m and revenue costs by £18k per annum. It should be noted however that approximately £531k of the current revenue costs, incurred through outsourcing decontamination activity, is not funded and therefore a cost pressure. Consequently additional funding of £549k per annum is required. In other words, while the increase in project costs over current costs is £1.9m, additional funding of £2.4m is required.

**Conclusion**

This paper briefly summarises the Full Business Case. The Full Business Case contains ‘Commercial In Confidence’ information and is not enclosed with this paper, but will be available to members at the NHS Board meeting should they wish to see it.

Members are asked to approve the development of a fully complaint, centralised Pan-Glasgow Decontamination service within an NHS-managed Industrial Unit.

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