Procurement Strategy for the Irish Health Sector

Final Report

11th February 2003

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1 Introduction

1.1 Background

The Health Sector is a significant purchaser of goods and services with an estimated annual non-payroll expenditure of €3.2 billion (based on the estimates for 2002), representing approximately 39% of total health sector expenditure.

The strategy outlined in this report identifies significant opportunities to provide more effective support for patient care and to ensure the more effective use of funds through improved procurement. The report contains key recommendations in the area of procurement practices, organisation and technology which when implemented can deliver improved quality of service to patient care providers.

To deliver the benefits envisaged, it will require investment. By investing in the required systems, processes, expertise and structures, there is the potential to achieve savings estimated at €439 million cumulatively over the first 7 years of the strategy, with annual benefits of €146 million in succeeding years.

The Health Boards Executive (HeBE) has recognised that the significant size of the Health Sector expenditure justifies investment in structures, expertise, systems and processes aimed at supporting service delivery, implementing best practice materials management, obtaining value for money and fully utilising eProcurement opportunities.

Arising from its commitment to achieving these objectives, and building on previous initiatives such as the introduction of Regional Materials Managers and the development of an eProcurement strategy for the public sector, the Health Sector initiated this project to develop an overall sectoral procurement strategy, which will act as a baseline for procurement in the Health Sector and serve as the basis for procurement policy in the future.

The project, which was sponsored by the Health Boards Executive (HeBE), incorporated a sectoral analysis leading to the production of a strategy for the Health Sector in relation to all aspects of the implementation of best practice procurement and eProcurement, including:

- Procurement practices, organisation and management
- Management Information Systems
- Coding and classification standards
- Technology capability
- Skills and Competencies
- The extent to which a 'value for money' culture currently exists.

As part of their requirements, the Health Sector defined and agreed the following objectives to guide the development of procurement and ultimately eProcurement:

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- To improve service levels to buyers, suppliers and users involved in public sector procurement.
- To develop a more integrated approach to procurement across public sector agencies and sectors.
- To minimise the transaction costs associated with procurement through the standardisation, streamlining and automation of the procurement process within, and where appropriate across agencies and sectors.
- To maximise value for money for Irish Public Sector expenditure by enhancing the buying power of the public sector.
- To promote competition among suppliers while maintaining reliable sources of supply.
- To optimise inventory levels through the adoption of efficient procurement practices.
- To make effective use of human resources in the procurement process.
- To promote the use of eCommerce in the wider economy.
- To improve the auditability of procurement expenditures.
- To be progressive in the adoption of procurement related Information and Communication Technologies (ICT).

1.2 Scope of the Strategy

Participants in the development of the strategy included all of the health boards, the Eastern Regional Health Authority (ERHA), and the Voluntary Hospitals sector. An extensive consultation process was carried out as part of the project to ensure the required involvement of key stakeholders in the analysis and strategy development activities. This included the use of workshops, focus groups and interviews with individuals in the relevant areas across all participating organisations (listed at Appendix G).

A fundamental concept underlying the strategy is that an integrated approach to procurement will be applied

- for all categories of procurement
- right across the sector, including all health boards and their institutions, the ERHA, voluntary hospitals sector, and the scheme for reimbursement of the costs of drugs and medicines by the General Medical Services (GMS).

It should be noted that, throughout the report, whenever the term 'board' or 'health board' has been used, it should be taken to refer to refer not just to the regional health boards, but also to the ERHA and to the voluntary hospitals as a group.

1.3 Approach

The approach used divided the project into two distinct stages: analysis and definition. The analysis phase focussed on describing the current procurement environment and identifying the issues and opportunities that needed to be addressed in developing the overall procurement strategy. In addition, the high level vision for procurement in the Health Sector was developed as a guide for the strategy development activities in the definition stage. In the definition stage, an overall strategy for procurement was developed, based on the vision produced in the analysis stage and the issues and opportunities identified.

The project was organised into three workstreams corresponding to the procurement, organisation and technology aspects of the strategy. The procurement workstream focused on the analysis of the current procurement practices, management framework and processes. It was primarily responsible for making recommendations on best practice procurement, coding and classification, unit and transaction costs, user satisfaction and procurement performance management.

The organisation workstream was responsible for assessing the current organisation, culture, roles and responsibilities associated with procurement in the Health Sector. It developed recommendations on the appropriate structures and integrating mechanisms required to support the new procurement environment.

The technology workstream looked at the current technology in use in the Health Sector and made recommendations to ensure that it can support the proposed procurement environment. particularly in relation to the requirements for management information and procurement data analysis.

The consultation process with stakeholders incorporated workshops and interviews with procurement practitioners, pharmacists, administration management and patient care providers including clinicians and nurses.

1.4 Structure of Report

The structure of the strategy report is outlined below with a brief description of each section.

Section 2 contains a ***Review of Existing Procurement Environment,*** which incorporates an overview of the assessment of the current procurement environment as well as the issues and opportunities identified in the Analysis Report.

Section 3 Sets out the ***Vision for Procurement*** and its associated objectives and principles. It also details the key recommendations for change and the initiatives to be implemented.

Section 3 sets the ***Targets*** which the strategy is designed to achieve, both in financial and non-financial terms, and ***Key Performance Indicators*** to be used and the approach to measuring progress against targets.

Section 4 sets out the ***Organisation and Management Recommendations*** at national and board level to support the vision set out in Section 3

Section 5 outlines the ***Information Systems and Technology Requirements*** identified to support the vision presented in section 3. These include both the applications and infrastructure required.

The ***Costs, Benefits and Funding*** recommendations are set out in Section 6. This presents the business case for the implementation of the strategy recommendations incorporating the potential benefits associated with achieving the agreed objectives and targets, the estimated annual funding requirements for projects, the justifiable level of investment to achieve identified savings and the timing of investment and savings

Section 7 outline ***the Way Forward***, showing an overview of the implementation programme required, the immediate actions required, and the assumptions, risks and challenges associated with the implementation of the strategy.

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2 Overview of Existing Procurement Environment in the Health Sector

2.1 Background

In recent years, significant progress has been made in the introduction of professional procurement practices into the health sector. There have been many notable successes:-

- A comprehensive Health Sector Procurement Policy has been adopted and is in use across the sector
- Significant progress has been made in the introduction of standard terms and conditions for contracts across many categories
- A number of national contracts have been put in place through co-operation across boards
- There is a significant level of board-wide contracts in place in all boards for certain categories of procurement
- Warehousing arrangements have been rationalised at board level in a number of boards, and in some cases integrated inventory management strategies have been developed and are being implemented
- Cross functional teams have been used in the procurement process for many major contracts
- Best practice techniques and some automated tools have been introduced in some boards in the area of tender management and evaluation
- Service level agreements have been introduced across a wide range of contracts
- Online order processing using an ERP has been introduced in some boards

Notwithstanding these successes, it is recognised that there is still significant scope for improving procurement to more effectively use the funds available for non-pay expenditure, and to improve the quality of service to patient care providers. Progress has been hampered to some extent by the lack of investment in the procurement function. In general, procurement is not sufficiently high on the agenda of senior management, and increased support is required from them for procurement initiatives.

The purpose of this section of the report is to set out the issues and opportunities identified in relation to procurement in the sector upon which the recommendations set out in the remainder of the report have been based. The information relating to the existing situation was obtained through brief questionnaires as well as procurement review and stakeholder workshops carried out with each health board, as well as the Eastern Region Health Authority (ERHA) and the Dublin Area Teaching Hospital (DATH).

It is important to note that the assessment carried out in the preparation of this report was not an audit, and did not involve a detailed evaluation of practices in any board or institution. Of necessity because of the short timescale available, it was carried out at a high level, relying mainly on the views of workshop participants to identify the key issues and opportunities across the sector. The findings do not necessarily reflect the situation in any individual board or institution, nor for any particular category of procurement. Boards are at various stages in the development of best practice

procurement, and some categories are managed more effectively than others. The focus in this analysis has been on identifying issues and opportunities which apply broadly across the sector and across most categories of procurement.

Because the purpose of the analysis is to provide an input to the development of a new strategy through the identification of issues and opportunities, it will by definition focus on those areas where changes or new initiatives might be of benefit. Consequently, this section primarily concerns itself with these, and does not focus on the many good procurement practices and initiatives already in place.

2.2 Procurement Practices and Processes

Procurement practices and processes currently in place across the health sector were analysed and compared with best practice, using an internationally recognised methodology developed by PwC Consulting.

2.2.1 Rationalisation of Specifications

This is the practice of proactively examining individual user requirements using a cross functional approach to identify the scope for rationalisation and standardisation so that an overall specification which meets the identified needs can be developed. Rationalisation of specifications is an essential enabler to the identification of opportunities for aggregation and the development of board and sector wide contracts.

There are a number of examples of national and board level contracts where specifications have been successfully rationalised. However, overall, health boards have not been successful in rationalising specifications for most goods and services, primarily due to the fact that appropriate organisational structures are not in place to support this process. It would appear that, overall, effective approaches are not in place to balance the need to rationalise specifications while at the same time taking account of clinical preferences. This has resulted in some situations where there is a proliferation of non-identical but similar products in use, and where separate equipment is maintained for the same procedures for different clinicians.

While some boards have established policies and procedures for managing supplier representatives and controlling their access to wards and personnel, it would appear that uncontrolled access to many hospitals may be resulting in undue influence and have detrimental effects on efforts to rationalise product specifications. The provision of free samples or equipment on trial can lead to a de facto standard being established in individual hospitals, making it difficult to standardise across health boards. The introduction of non-standard items by supplier representatives leads to reduced compliance with existing contracts, confusion in ordering and limited negotiation of commercial terms. In addition, equipment offered on 'free trial' often has consumable and maintenance costs that may not be taken into account in accepting the equipment or assessing total cost.

In the community care area, little analysis appears to have been undertaken of the potentially significant opportunities to rationalise specifications in order to reduce ad hoc purchasing and to move towards contracted arrangements with selected suppliers.

2.2.2 Demand Aggregation

Demand aggregation is the consolidation of requirements across hospitals/institutions or health boards for a category of procurement so that the combined volumes can be used to obtain better contractual prices, terms and conditions than might otherwise be obtained.

There is significant unrealised potential to aggregate demand for most goods and services within and across health boards. Although detailed statistics were not available, it is clear that national contracts represent a very small proportion of overall non-pay spend, and that similarly, the percentage of non-pay spend represented by contracts aggregated at board level is low in most boards. The primary reasons for this would appear to be the lack of appropriate management structures at board and sector levels, the need for increased support for co-operation among boards at senior management levels, the timescales and the cost of the process, and legal uncertainties due to difficulties experienced in relation to litigation.

Drugs and medicines, which account for more than 13% of non-pay spend, excluding the costs of the General Medical Services (GMS), are procured by individual hospitals and contracts are not aggregated across health boards or the sector as a whole. While they are purchased according to the IPHA price agreement which operates on a national basis, it is not clear whether this agreement is the most appropriate way to deliver value for money at hospital and GMS levels.

2.2.3 Category Management

Category management is the approach whereby strategies are developed for all aspects of the procurement of specific goods and services covering areas such as opportunities in the supply market, level of aggregation, contracting approach, performance requirements, service level requirements and logistics approach.

Category management approaches are being introduced within health board spend areas where purchasing is the responsibility of the Regional Materials Managers. A significant proportion of overall procurement, however, still tends to be carried out on an ad hoc, fragmented basis. However, the adoption of category management strategies is hampered by the inadequate availability of information on procurement expenditure, and by the lack of standardised item coding systems.

Because of the low level of sector-wide initiatives, significant duplication exists in developing category management strategies and contracting at board level. Such duplication and fragmentation mitigates against being able to counter any possible trends towards monopolistic pricing strategies by dominant suppliers.

There is evidence that for certain categories of procurement, it would be beneficial for the health sector to take concerted action to help stimulate long term competition.

2.2.4 Commitment of Spend

Effective contracting requires that, where feasible, the contracting authority commits to specific levels or ranges of expenditure under the contract. In the absence of this commitment, suppliers find it unnecessary to offer their best commercial terms and they are encouraged to 'cherry pick' around the contract.

Usage patterns for many goods and services in the health sector are highly predictable, and it should be possible to confidently commit to levels of expenditure in these areas. In general, however, specific spend levels are not committed when contracting with suppliers. The reasons for this would appear to be:

- Custom and practice
- Uncertainty as regards levels of usage expected, and the fear of contractual penalties
- Inadequate information on historical levels of usage, often due to systems deficiencies
- Inability to ensure contract compliance
- Uncertainty regarding available budgets

2.2.5 Appropriate Supplier Relationships

Relationships between public sector buyers and their suppliers must of necessity be transparent and independent, and subject to strict guidelines at national and EU level. Nevertheless, this does not preclude the adoption of many aspects of best practice, in particular service level agreements, supplier performance monitoring and partnership ways of working involving suppliers.

There does not appear to be a proactive process in place at any level in the health sector to determining appropriate approaches to dealing with different categories of suppliers. As a result, most supplier relationships are developed in response to immediate needs, with little thought to the long term relationships required.

There is a view expressed by health sector staff that the need for compliance with regulatory requirements such as EU Directives, and the exposure to Freedom of Information enquiries, precludes many aspects of best procurement practice found in the private sector in relation to dealing with suppliers. While there is a certain validity in this, there is some evidence that it tends to have too great an influence in restricting the adoption of good procurement practices.

Service level agreements are now in place for some key contracts, and this concept is making significant inroads in the health sector. However, overall, there is a great deal of scope for increasing the use of service level agreements and performance measures in managing the relationship between the health sector and its suppliers.

Due to the absence of effective mechanisms and funding for providing information on the results of research and development to clinicians, they are dependant in many cases on suppliers for this information. This puts them in an unfair position in that they may feel obligated to deal with those suppliers who best support them in this way. In addition, it does not ensure that the information provided is either complete or objective.

2.2.6 Procurement Performance Management

Procurement performance management involves understanding and tracking key metrics such as the level of expenditure on each category, the percentage of expenditure under contract, unit cost reductions, the numbers of suppliers per category and the performance of suppliers within each category in terms of cost, quality, service and environmental issues.

While some boards have well-established reporting mechanisms in place for the procurement performance, in most areas procurement performance is not effectively monitored or reported. There is no effective process for managing procurement performance at a sector level. While the Department of Health does require reporting on certain key performance indicators, these are incomplete, and the information required to measure them effectively is difficult to obtain. In addition, they are confined to expenditure controlled by the Regional Materials Managers, and take no account of other expenditure.

There are generally no formal processes in place to identify or monitor savings achieved. In addition, there is no clear policy in operation across the sector which would provide incentives for promoting effective procurement by allowing savings achieved in one area to be re-directed to other areas of expenditure within the control of the budget-holder.

2.2.7 Compliance in the Use of Contracts

When contracts are put in place, it is important to maximise their usage and to eliminate 'off-contract' buying of the goods or services in question. If suppliers believe that contract compliance will be an issue, they may not

offer their best prices.

Where draw-down contracts are in place and available for use, their level of compliance is frequently impacted by the fact they are in many cases not mandatory in practice, so individuals have the option of purchasing off-contract using other suppliers and specifications. The existence of manual purchase order books means that individuals can purchase items outside of existing contracts up to their own approval limits. In addition, clinicians who express a preference for items other than those covered by contract are generally facilitated. The level of contract compliance can be impacted by:

- Lack of knowledge of existence of contracts among clinicians/key users
- The impact of supplier representatives in influencing clinical preference
- The absence of any consequences for non-compliance

2.2.8 Demand Challenge

In sourcing new goods and services, there should be a process of challenging the requirement – can we do without it, is it already in stock, are alternatives an option, is there a workaround, make or buy, rent or hire, lowest cost alternatives, re-use, etc.

Up until recently, clinicians have operated independently in their prescribing practices and in their use of medical and surgical equipment and supplies. The processes and structures necessary to challenge demand were not in place. Similar situations are found in other categories of expenditure.

While effective demand challenge appears to be lacking in general for many categories, there is evidence that some changes are now taking place. For example clinical pharmacists are employed in some areas to assist clinicians in specifying their requirements, and to challenge their existing preferences. Drugs and Therapeutic Committees are in operation in many hospitals to ensure that knowledge is well represented in purchasing decisions. In addition, all boards are now using cross-functional teams for the specification of requirements for a range of goods and services.

2.2.9 Effective Logistics from Manufacturer to the Point of Use

Cost effective supply processes require an overall assessment of how goods are provided throughout the whole supply chain from manufacturer to point of use for health care. This includes determining the right point of access in the supply chain (i.e.: manufacturer, wholesaler, distributor or agent) and the right approach to logistics including inventory, consolidation of requirements for users and delivery arrangements. This should be based on the characteristics of the item, the service level requirements of the user, the capabilities of suppliers, and synergies available between different categories and locations.

There is no overall logistics strategy for the Health Sector. There is a proliferation of approaches in use for the management of inventory and delivery logistics across the sector. Although at least one board is implementing a strategy of integrated materials management, in general approaches have evolved individually within different boards for the various categories of goods, and there would appear to be significant opportunities for rationalisation to improve cost-effectiveness.

Centralisation of stores exists to varying degrees in some health boards. While it appears to have been effective to some degree in reducing duplication of infrastructure and resources, experience in some hospitals has been that it has led to a less effective delivery service, and has resulted in over-ordering and build up of local inventory to compensate.

Inventory management and logistics approaches have generally been designed primarily for the secondary care locations, and there has been little attention paid to opportunities for rationalisation in the growing and increasingly complex area of community care.

The supply arrangements in place for drugs and medicines appear to work well and inventory issues do not seem to be significant. The pharmacists take responsibility for ensuring adequate inventory levels in the hospitals/wards for drugs and medicines based on a 'top-up' approach, although stocks are duplicated at hospital and supplier level. Orders for drugs and medicines not stocked at ward level are delivered with guaranteed response times.

2.2.10 Minimisation of Transaction Cost

One of the objectives of effective procurement is to minimise the cost of time and materials required to carry out the purchasing transaction from requisition through to payment.

All purchase orders, even where automated systems are in use, are paper-based, and either phoned, faxed or posted to suppliers. Neither EDI nor eProcurement techniques are generally in use, except in the area of drugs and medicines, where pharmacists' orders are communicated electronically to suppliers.

Processing of invoices and payments is organised differently in different boards. In some, all invoices are processed at hospital level, while in others there is a degree of centralisation. The ERHA has a shared services centre where payments for the three area health boards are processed. There is no evidence of plans for similar cooperation among other boards.

From the information provided, it would appear that there is an inordinately high number of invoices (>100,000 per annum) being processed in some boards. This may be due to the level of non-contract purchasing, inefficient invoicing arrangements with suppliers, or the lack of appropriate mechanisms for low value purchasing (e.g. purchase cards, which are used or on trial in a number of the boards). There are some examples of electronic funds transfers (EFT) and eBilling in the payment of supplier invoices. However, there is no reason why most suppliers should not be paid this way.

Expenditure approvals are not linked to job responsibilities and can often be overly complex for the levels of expenditure in question.

2.2.11 Procurement Management Information

The provision of timely, accurate and comparable management information is essential to enabling effective analysis of spend and identification of opportunities to improve procurement performance across the health sector.

A variety of different coding and classification systems is in use across the sector. Even within boards, it would appear that separate systems are in use. The NSV system is used in two boards, but in one of these it is heavily customised. All other boards are using in-house systems which vary in terms of content and structure from the other boards' systems. The lack of a standardised approach to coding means that it is very difficult to obtain useful management information.

In some boards, coding disciplines are not rigorously applied, and as a result the quality of information stored can be poor. Consequently, it is difficult to carry out meaningful analysis at board or national level to support procurement decisions.

Because of the widespread usage of manual purchase order books , which provide little or no detailed information for recording in a computer system, it is difficult to analyse or report on this expenditure.

2.3 Organisation and Management

A consistent sector-wide organisational focus on procurement does not currently exist - significant purchasing power of health sector is not realised due to fragmented nature of procurement across the sector

There is no single point of responsibility for the effectiveness of procurement performance across all categories.

Existing organisational mechanisms are variable in their success in attempting to:

- promote an effective approach to the development and implementation of category management strategies at sector level
- develop and implement effective approaches to logistics management at sector level
- ensure adequate demand challenge for clinical requirements in order to rationalise the range of products in use
- facilitate expert clinician input to product specification
- provide quality information to clinicians in relation to products available (currently this gap is filled by sales representatives)

Procurement is not sufficiently well represented in most boards at senior management level. This means that procurement is not getting the same level of management focus as other functional areas. Within the existing resources allocated to materials management across the sector, there is an insufficient focus on strategic procurement activities such as portfolio and category management, sourcing and contracting.

Procurement in the area of community care is developing and creating its own structures in some of the health board areas. This is being done at a local level so there will not be a consistent approach taken and resources may be replicated across the country

Although significant attention has been paid to procurement training in some boards, there is no coherent sectoral approach to training. Very few staff have professional procurement qualifications, and the existing level of training budgets is unlikely to prove adequate in addressing this training deficit.

2.4 Technology and Systems

Although similar systems are in use for procurement in some boards, there are no standard IT systems in use across the health sector.

In the area of drugs and medicines, Cliniscript is in use in the majority of boards.

There is a variety of systems in use, including SAP, Agresso, Smart Stream, GEAC and Torex Integra for financial and inventory management, ARAN for financial management, purchase ordering and inventory management, and EPAS for tendering and contract management.

There are no standard product, supplier or other coding system in place, so each IT system tends to use its own coding structures.

It has recently been decided to implement a standard financial management system across the health sector. While it is anticipated that this would incorporate inventory management and logistics, the project is in its initial stages, and it is not clear as to the extent of support for procurement which is planned.

Overall, technology support for procurement across the sector is not well developed and will need significant attention in order to support best practice procurement..

3 The Vision for Procurement

3.1 Overall Context

The overall ***strategic goal*** of the procurement vision is to maximise the effectiveness of procurement in providing support for effective and efficient patient care. The patient is the focus of the strategy, and all opportunities to improve procurement should be viewed in the light of their contribution to improved patient care or greater throughput of patients. This reflects the need to ensure that the objectives for support services such as procurement are aligned with those of the overall health board and that measures of success are defined in terms of the ability of procurement to support the provision of patient services.

Two key ***strategic objectives*** have been identified which are necessary to ensure that the overall strategic goal can be met:

- To ensure that the provision of goods, services and facilities to patient care providers and their support services are at the required/appropriate level of quality of service.
- To maximise the effectiveness of the use of funds available for procurement in the Health Sector

A vision for procurement which is required to meet these strategic objectives is set out below, along with the principles, recommendations and actions needed to achieve the vision.

3.2 The Vision for Procurement

The vision for procurement which will achieve these strategic objectives envisages a situation where

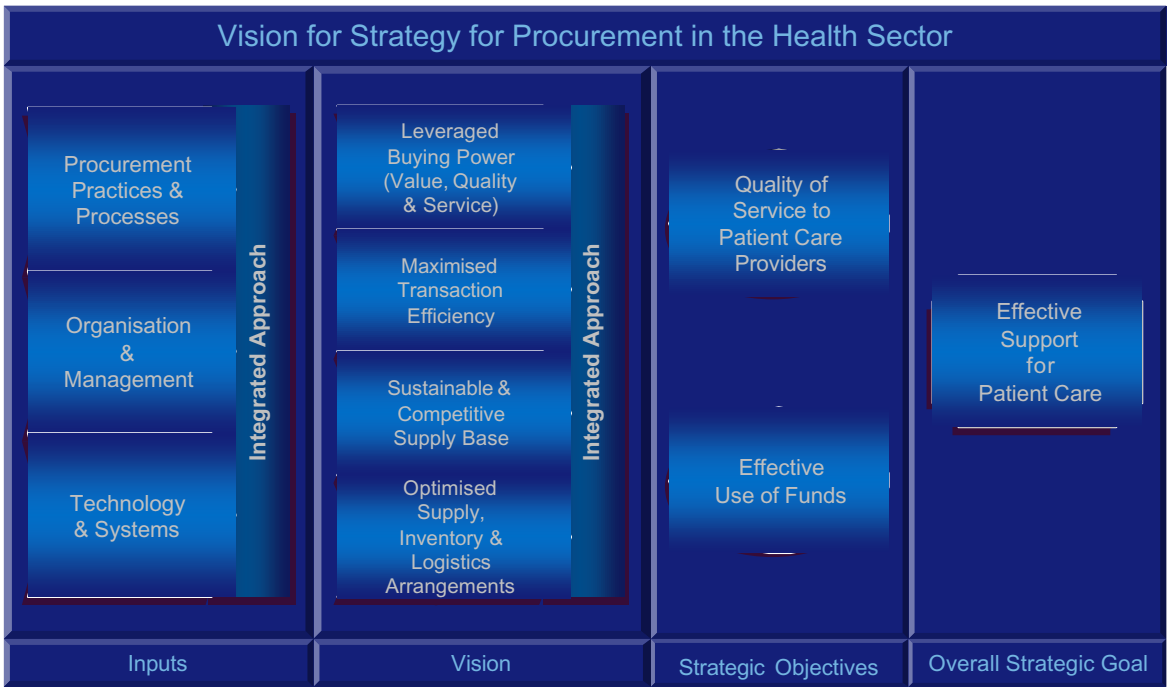
- The buying power of the Health Sector is leveraged to optimise value, quality and service,
- The supply base is competitive and sustainable
- The efficiency of transactions associated with procurement processes will be maximised
- Supply, inventory and logistics arrangements across the Health Sector are optimised

A fundamental prerequisite to achieving these objectives is the adoption of an integrated approach to procurement across the sector, which this strategy is designed to deliver. The strategy sets out the changes and new approaches are required to

- Procurement Practices and Processes
- Organisation and Management Structures
- Systems and Technology

The diagram overleaf illustrates the key components of the strategy. In the remainder of this section, we describe each of the components of the vision, the changes that are required in procurement

practices and processes to achieve the vision, and the initiatives that are required to ensure that the changes are implemented.



In this section, each of the key components of the vision, set out in the diagram above, is described, along with ***some*** important underlying principles. For each component, the procurement practices and processes required to achieve it are set out, as well as the actions required to implement the changes recommended.

The enabling infrastructures required in terms of organisation and management, and systems and technology are described in sections 5 and 6.

3.2.1 Leveraged Buying Power

3.2.1.1 Vision

The health sector is a major purchaser of goods, services and works – in excess of €3.2bn per annum. It will use its scale through effectively leveraging its buying power to ensure that it obtains maximum quality, service, and value from the supply base, in order to make the most effective use of the funds available, and to improve the quality of service to patient care providers. All health agencies will co-operate to take maximum advantage of the combined buying power, expertise and volume of health service and public service procurement (in line with Government eProcurement and related VFM policies). Maximum co-operation coupled with the most effective contractual arrangements arising from joint procurements will be pro-actively pursued and put in place. Wherever possible health agencies will seek to be part of procurement initiatives and contracts which include the wider public service where this can achieve maximum value for money with maximum effectiveness in terms of health service delivery. Ultimately, the vision is to contribute to national competitiveness through the achievement of improved efficiency and productivity in patient care delivery.

The strategy envisages that in 5 – 7 years time,

- There will be a fully integrated sector-wide framework in place for the management of procurement at individual board and sector level, based on a portfolio and category management approach, in order to maximise buying leverage
- The proportion of external expenditure which is subjected to real competition in the supply base will be maximised, and the management infrastructure will be engaged to ensure compliance with contracts which have been put in place with chosen suppliers
- Demand will be aggregated, as part of a coordinated strategy, to the highest level which is supported by a sound economic rationale,
- Professional procurement expertise and practices, as well as the appropriate technical, clinical, and stakeholder inputs, will be applied to the sourcing and contracting of all major categories of external expenditure

3.2.1.2 Key principles

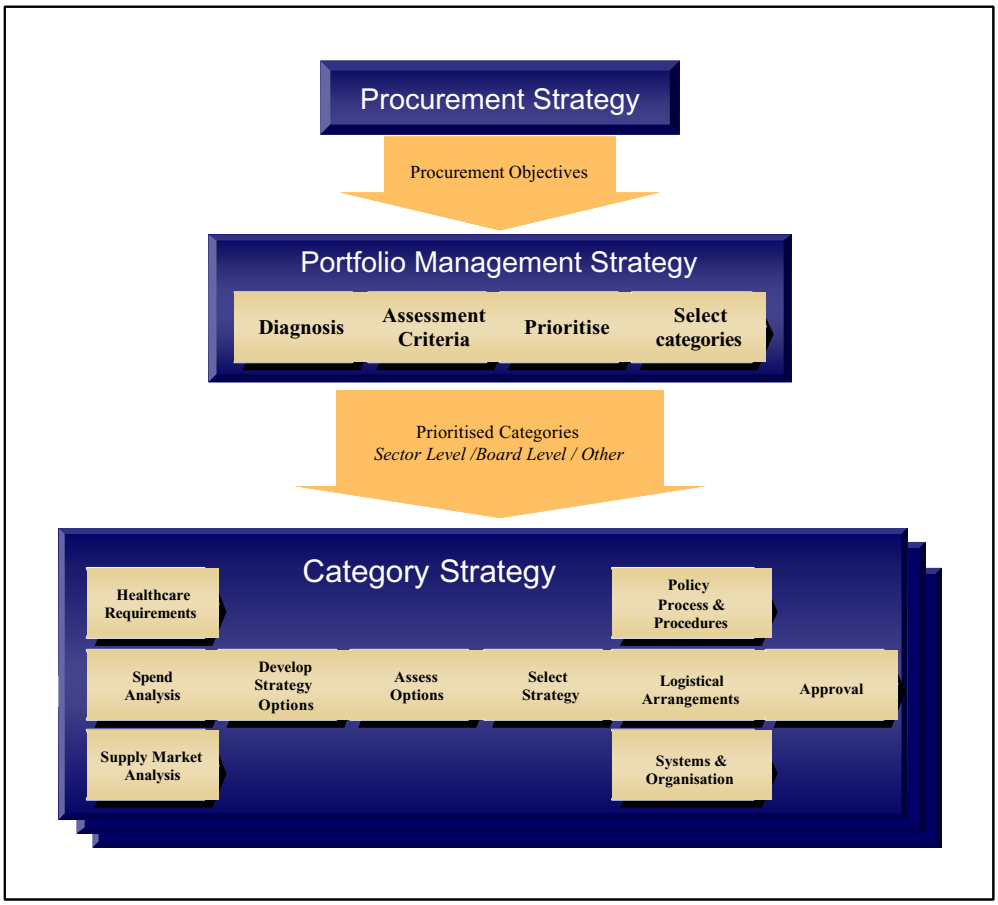
- The principal documents which detail how buying leverage will be achieved, including the sector procurement strategy, board/agency procurement strategies, and category strategies will be signed off by stakeholders in advance of implementation
- Demand information will be made visible, and shared and used across hospitals, boards, and the sector, as appropriate
- Buyers, core service providers, and patient care providers will have timely access to the necessary information to understand external expenditure
- Specifications for products and services will be developed in a way which encourages the aggregation of demand, and commercial choice
- Supply market information will be gathered systematically for current and potential suppliers – domestic and international
- The use of devolved budgets will be supported across the Health Sector
- Savings achieved through improved procurement will be retained by budget holders for re-investment in patient care in line with the priorities of individual boards

3.2.1.3 Key Recommendations - Procurement Practices and Processes

3.2.1.3.1 Portfolio and Category Strategies

A consistent and logical framework should be adopted for the management of all categories of external expenditure within the health sector. Portfolio and category strategies form the bedrock of the procurement strategy.

The diagram overleaf illustrates the key components of the framework.



3.2.1.3.2 Portfolio Strategy

Portfolio strategies will determine the level at which category strategies should be developed and managed – national, sector, region, board, hospital, or local – and the priority of the categories.

The approach will take into account:

- the strategic importance of the category
- the prevailing dynamics within the supply market
- the objectives which are critical to effective patient care/ core services provision
- opportunities for aggregation and leverage
- the level of spend

National portfolio strategies should be developed and maintained at sector level, in close consultation with all of the boards.

Consideration will also be given as to the best mix of skills and experience required to develop and implement the appropriate procurement category strategy in each case, and who is best placed to coordinate the process.

The output is therefore agreement between the sector procurement lead and the boards as to the level at which each category strategy should be developed and managed, the priority assigned, and the individual who should co-ordinate category strategy development.

3.2.1.3.3 Category Strategies

For each main category of spend, formally approved category strategies will set out in detail how quality, value and service objectives will best be achieved, taking into account the dynamics of the supply market and the overriding requirements of patient care and core services provision. The category strategies also set out the charter of agreed actions and behaviours which are critical to successful achievement

Category strategies will be developed at sector, board or local level, in line with the outputs of the portfolio strategy. Each category will have a designated category manager, whose responsibility is to:

- involve the relevant stakeholders and individuals in developing the category strategy
- develop the strategy, including the target outcomes and proposed benefits, and ensure that it is approved and signed off
- help implement the strategy and the resulting new supply arrangements, in line with the target outcomes
- deploy the best mix of skills and experience required to develop and implement the appropriate category strategy in each case

Depending on the level of strategic importance and the nature of the category, the category strategy will address the following:-

- An understanding of the critical drivers which contribute to total cost, and efficient and high quality patient care delivery or core service provision
- An understanding of the stakeholder network, budgetary constraints, and other issues to be overcome, together with an explanation of how the stakeholders will be expected to support successful strategy achievement
- An analysis the supply market, supplier costs, and the maturity of the market in relation to eProcurement
- An understanding of how the supply market is structured, the logistics options available, including the requisite approach to inventory management through to the point of use
- Legal and regulatory and environmental requirements and constraints
- The approach to specification development, product/service standardisation and rationalisation, and to maintaining a repository of important product related information
- An assessment of forward demand, and the level to which demand should be aggregated
- An assessment of the options for segmenting the demand into discrete parcels of business, and the number of suppliers to be selected, together with an understanding of the impact these options on the supply market (short and long term), and how long term competitiveness is to be stimulated and maintained
- Requisite strategy for ensuring maximum competitiveness in response to requests for quotations/tenders including, approach to tendering, contract length, extent to which contracts are mandatory, levels of commitment within contracts
- Adequate consideration of policy and compliance issues, including the specific approach for ensuring commercial confidentiality
- The agreed actions and behaviours which are critical to successful achievement
- Appropriate selection criteria for short-listing and award

- The approach to performance measurement, including a set of target outcomes for the category strategy, such as
    - Target number of suppliers
    - Target number of different products in use
    - Target "Total Cost in Use" for the relevant products
- Category-specific requirements for management information and product coding
- The appropriate approach to supplier relationship development
- An implementation plan and statement of expected benefits

The proposed category strategy will be developed by an appropriately designed cross-functional team and issued in draft to all relevant stakeholders for consultation. Expectations of stakeholder support will have been made clear in the strategy. When finalised, it will be formally signed off by all the relevant stakeholders, and this will empower the team to put the necessary arrangements in place, including measurement of the target outcomes for the category strategy.

3.2.1.3.4 Demand Planning

Demand planning encompasses making the best use of available demand information in leveraging commercial arrangements, and making sure that suppliers can properly meet future requirements. A process for adequately challenging both the volume and specification of demand is essential for ensuring that wastage is avoided, and opportunities for cost effective alternatives are taken

- Demand information for capital projects and revenue expenditure will be derived from core sources such as service plans, capital programmes, DRG/case-mix activity plans, and other sources
- Demand information, currently fragmented, will be made visible and transparent across user, hospital, board, and sector level. Where appropriate, it will be aggregated across user, hospital, board, and sector level, in accordance with the agreed category strategy.
- Systems will be put in place to enable the health sector to obtain a single view of all business carried out with each supplier across the sector
- Annual procurement plans will be integrated with business plans on a rolling basis
- When contracting for the supply of goods or services, demand planning will be carried out at a sufficient level of detail to support firm or forecasted commitment of expenditure, as appropriate, thereby facilitating optimal terms from suppliers
- Demand planning for equipment will include the consideration of standardisation opportunities, and strategies for cost effective maintenance and consumables support
- Demand challenge – volume and specification – will be a formal activity within the implementation of category strategies. Processes will be in place to challenge demand volumes to ensure consistency with the planned volume of patient care activities, and the nature of those activities. This applies to services (eg rates, insurance, legal expenses, maintenance, travel) and indirect supplies such (e.g. stationery, IT consumables, engineering supplies), as well as direct inputs such as drugs.

3.2.1.3.5 Budgeting

Budgeting allocates the accountabilities for managing all aspects of non-pay expenditure. Managing the procurement process involves co-ordinating expenditure across a complex network of budget holders, boards and suppliers. Connectivity between different levels of budgeting is essential, if savings are to be correctly monitored and assigned

- Responsibility for budgets for external expenditure will be devolved to the levelof clinical directorate or department level. Within the devolved budgets, there will be flexibility to utilise the funds available to provide the most effective patient care – this will provide an incentive to budget holders to fully cooperate with savings initiatives and to use any savings achieved to best effect.
- The annual non-pay budgetary process will be based primarily on the impact of forecast changes in activity levels and case mix upon procurement expenditure. This will significantly reduce the negative effects of the 'use it or lose it' mentality.
- The Procurement Function will have a direct involvement in the development of budgets for external expenditure from an early stage
- Budget planning will take account of the revenue impact of capital expenditure (e.g. maintenance and consumables)
- Actual volume usage should be compared with estimates at the end of each year, and appropriate adjustments made to future estimates

3.2.1.3.6 Specification of Requirements

Development of effective specifications lies at the heart of ensuring that the right products and services are used, whilst at the same time ensuring that aggregation of demand and commercial choice are used effectively to enhance buying leverage

- A holistic view to "total cost in use" will be encouraged to help give an informed view of "best value", so that specifications are optimised
- Specifications will be developed by the appropriate multi skilled teams, either led by of with the participation a procurement professional. Where appropriate, "expert specifiers"/"technical experts" with deep product knowledge will be included on the teams
- Factors which will be taken into account will include opportunities to improve service, quality, and the effectiveness of patient care, as well as opportunities for rationalisation, standardisation, and aggregation of demand
- Dedicated clinical, nursing or other specialists will be used to support the specification of technical requirements and liaise with clinicians in rationalising products in use
- A central repository of information will be made available to support and inform the development of specifications. The combination of "expert specifiers" and information repositories will create centres of excellence specific for complex categories of external expenditure

3.2.1.3.7 Procurement Performance Measurement

Procurement performance management will measure the progress towards the strategic goal for procurement to provide effective support for patient care. By definition, this means the "whole procurement process", which includes, but is not exclusive to, the contribution of the Procurement Function

The dilemma in measuring performance of the procurement function in the health service is that focussing on the easiest measure – price – can obscure the other major drivers of achieving an efficient high quality and cost effective patient care service.

Suppliers who offer to undercut existing contracts often exploit this obscurity by offering prices to hospitals which generate price savings on paper, but which cost more in total as a result of increased transaction volumes, fragmented deliveries, and increased portering activity within hospital sites. This

often inflates the whole price structure in the supply market for that category. Examples are likely to include drugs and medicines, and medical and surgical supplies.

Procurement performance therefore has to be measured on a broad basis, which will include the impact of any price reductions as part of a programme to achieve reductions in total cost, as well as contributing to service quality and efficiency improvements in the provision of patient care, and the core supporting services.

- Ongoing monitoring of procurement information and performance will be implemented. The primary measures of the procurement function will be:
    - Number of Boards with approved procurement strategies aligned to the national procurement strategy
    - Percentage of non-pay expenditure influenced by procurement – capital and revenue
    - Percentage of revenue non-pay expenditure covered by signed off category strategies
    - Percentage completeness of category strategy implementation programmes, and compliance with target outcomes
    - Percentage of non-pay expenditure covered by contractual arrangements
    - Cumulative value of non-pay cost reductions achieved within each Board, and across the sector (For example the percentage reduction in the total external cost of specified clinical procedures)
    - Extent to which principal internal customers "value" the contribution of procurement staff in influencing the principal spend categories which affect them (by survey)

Recommended Actions - Leveraging Buying Power

1. HSPU* to carry out a review of key contracts and category strategies in place across the sector and facilitate any opportunities for extension or replication to other boards.
2. HSPU to develop the sector portfolio strategy incorporating a plan for the rollout of high priority sector level category strategies
3. Based on sector portfolio strategy, HSPU to pilot the development of sector-level category strategies using the top 3 high priority categories (including Drugs & Medicines).
4. Coordinated by the HSPU, each board to develop of its board-level portfolio strategy, incorporating a plan for the rollout of high priority board level category strategies.
5. Each Board to develop a pilot category strategy for one of its high priority categories – each board to pilot a different category, and where feasible should pilot the impact of committed volumes upon commercial terms.
6. HSPU and Boards to review the results of the pilot projects, and refine rollout plans as necessary
7. HSPU and boards to roll out category management strategies.
8. HSPU in conjunction with the boards will develop a standard coding approach and an implementation plan.
9. HSPU to carry out a high level analysis of the structure and dynamics of the overall health sector supply markets to support the development of category management and logistics strategies
10. Each Board to carry out reviews to identify the level and scope of non-contract (ad hoc) procurement, and develop prioritised plans, in consultation with HSPU, for reducing this where appropriate through
    - developing new contracts
    - increasing coverage of existing contracts where feasible and economically beneficial.
    - increasing compliance with existing contracts through improved communications and compliance policies

Recommended Actions - Leveraging Buying Power Contd.

11. HeBE to develop job and candidate profiles for the positions recommended in this report, and facilitate the implementation of the recommended organisational structures and the deployment of appropriate resources at sector and board levels
12. HSPU to review and update the health procurement policy, and develop a sector procurement procedures and standards manual, including standards for portfolio and category strategies
13. HSPU to develop a framework for the assessment of procurement practices at board and institution levels Boards, supported by the HSPU, to carry out individual reviews and assessments of best practice against the assessment framework
14. Based on the results of the reviews, HSPU to develop prioritised plans for the rollout of procurement best practices across the sector, along with change, communications and training programmes. HSPU to design and implement a programme for the development and monitoring of performance metrics for procurement management practices across the sector
15. HeBE to approve the strategic procurement targets set out in this report
16. Each Board, in consultation with HSPU, to agree board targets and to incorporate those targets in its portfolio strategy
17. HSPU in conjunction with the boards to review and refine the key performance indicators and metrics in use for the management of procurement performance
18. HSPU to develop a system of tracking and reporting benefits realisation based on the benefits envisaged in this strategy
19. HSPU to develop recommendations on the approach to devolution of budget responsibility and its role in providing motivation for the effective use of funds available for procurement.
20. Develop baselines for Unit costs, and an approach to ongoing monitoring (See Appendix X)

* HSPU is the working title for the Health Sector Procurement Unit, a body recommended in the next Section (Organisation and Management Recommendations)

3.2.2 Maximise Transaction Efficiency

3.2.2.1 Vision

A key aspect of the vision will be to minimise the time, effort and cost of carrying out the transactional procurement processes from requisition through to payment. The combination of correctly matched and authorised order, receipt, and invoices, provides the basis for suppliers to be remunerated in an efficient and timely way.

3.2.2.2 The strategy envisages that in 5 – 7 years time

- The number of transactions to be processed will be reduced as a result of reduction in ad hoc (off contract) purchasing, improved logistical arrangements, and reductions in rework resulting from errors
- The use of eProcurement facilities will be maximised
- Transaction processes for routine procurement activities will be streamlined and automated as far as possible

3.2.2.3 Key Principles

- The identification and promotion of best practice in transaction processing should be co-ordinated at sector level. Responsibility for application of best practice to local need should reside within individual boards/institutions.
- Maximum use will be made of eProcurement techniques linking purchasers to suppliers, in line with the public sector eProcurement strategy
- Procurement processes will be standardised, streamlined and automated where possible to minimise transaction costs, including phasing out manual purchase order books
- Data will be entered into procurement systems only once and will be made available for all relevant transactions
- A continuous improvement approach to procurement transaction processing will be supported

3.2.2.4 Key Recommendations - Procurement Practices and Processes

3.2.2.4.1 eProcurement Transactional Processes

- The coverage of electronic processing of requisitioning, ordering, approval, receipting, matching, and payment should be maximised. Where this is implemented across institutions and boards, policies. processes procedures and documentation will need to be standardised
- Standard documentation should be developed where appropriate

3.2.2.4.2 Shared Services

- Where appropriate and economically advantageous a “shared services” approach to transaction processing will be used across institutions and boards. This will require standardisation of policies, processes procedures and documentation. The payment process is a prime candidate for a “shared services” approach, at board, region, or sector level, because of the potential economies of scale achievable with high volume transactional processing
- Such services could be operated from within the sector, or via a commercial provider, and should be the subject of rigorous market testing to determine the appropriate route

3.2.2.4.3 Low Value Orders

- Appropriate solutions, such as eProcurement or purchase cards, should be implemented for low value orders

3.2.2.4.4 Consolidated Invoices

- Advantage should be taken where feasible of consolidated invoicing, backed up with cost centre information at budget-holder level. This can be accomplished through improved logistical arrangements (off-site consolidation of stocked items), and consolidated monthly invoices from suppliers.

3.2.2.4.5 Payment discounts

- Opportunities for improved discounts through early/on-time payment should be identified and exploited, supported by the more effective matching processes

Recommended Actions – Maximising Transaction Efficiency

1. HSPU, in conjunction with other HeBE initiatives, to develop and implement plans for the rollout of a standard integrated ERP, which can support sector-wide eProcurement, logistical and inventory management requirements.
2. HSPU to identify and roll-out best practice models and electronic systems for requisitioning/ordering/receiving at hospital level.
3. HSPU will facilitate boards in carrying out a study to identify opportunities to exploit shared service approaches to transaction processing.
4. HSPU to develop and roll-out best practice models, standards and guidelines for reducing transaction volumes including areas such as:-
   - Low value procurement, (e.g. purchase cards)
   - Early or prompt payment discount
   - Consolidation and rationalisation of invoice processing
5. HSPU to design and implement a programme for the development and roll out standards for procurement documentation across the Health Sector
6. HSPU to develop baselines for transaction costs, and an approach to ongoing monitoring (see Appendix C)
7. HSPU to develop baselines for user satisfaction and an approach to ongoing monitoring (see Appendix D)
8. HSPU to carry out a high level review of existing practices in transaction processing across the sector.

3.2.3 Sustainable and Competitive Supply Base

3.2.3.1 Vision

The vision is to build and maintain a competitive and sustainable supply base, whereby there is sufficient competition for suppliers see that offering best value is in their interest, whilst as the same time making essential investments to ensure continuous improvement.

The strategy envisages that in 5 – 7 years time

- Unit cost levels will be consistent with national and international benchmarks, where comparisons are feasible and appropriate
- Unit cost levels will be reducing in line with the effects of increased competition and resultant efficiencies in the supply base
- Supplier access to the health sector market will be enhanced, thereby facilitating greater competition
- Appropriate supplier relationships will be developed, including supplier partnerships where this will encourage suppliers to invest and develop their services in ways which give gain to the Health Sector
- Category strategies will be designed to help sustain the right number of competitors in the supply market, with the appropriate apportionment of business across suppliers designed to encourage long term competitiveness in the supply market
- Information will be shared across agencies to help support and stimulate competitive supplier behaviours and responses

3.2.3.2 Key Principles

- The transfer of knowledge from suppliers to the Health Sector will be maximised in order to facilitate commercial choice and competitiveness
- Access by suppliers to medical staff, patient care, and core service providers will be effectively managed and coordinated to ensure that information can be shared as efficiently as possible, and without obligations
- Suppliers who deliberately "cherry pick" around existing contracts in order to manipulate market price levels will be identified. Category strategies, including the use of volume commitment and the identification of sources of contract leakage will be used to remedy this problem, and bring down artificially high market pricing.
- Where practicable, contracts should be made flexible enough to permit multiple agencies to participate.
- The sector will maintain consistency with national economic policies in relation to regional development and small and medium sized enterprises (SME)
- The sector will actively seek to influence EU guidelines to provide sufficient freedom to encourage short and long term competitiveness in the supply market

3.2.3.3 Key Recommendations - Procurement Practices and Processes

3.2.3.3.1 Tendering and Selection of Suppliers

The approach to tendering and selection of suppliers shapes the resulting responses from the supply market to the specified requirements, and is pre-determined as part of the category strategy. The processes are designed to ensure delivery of the public sector's commitment to transparency and access, whilst at the same time ensuring that competitive commercial arrangements are

achieved

- The supplier base will be rationalised to the appropriate numbers for each category
- Appropriate criteria will be applied to covering the various situations covering accreditation, short listing, and approval, of suppliers – for incorporation into the category strategies
- Category specific strategies – see above – will determine the level of aggregation, the approach to specification, tendering, the likely length of the contract, and the criteria for supplier selection, as well as the number of suppliers across whom the business is to be split. As wide a view as possible will be given to potential sources of supply, including international competition
- Issues of future contract compliance will have been considered as part of the category strategy. Suppliers who fail to win contracts by offering competitive prices must be discouraged from "cherry picking" profitable business via the back door.(i.e. by picking off individual hospitals or Boards, or by using direct influence on clinicians and medical staff) Suppliers invited to quote or tender must be made to see that this is their principal opportunity for winning business
- Criteria for supplier short-listing, and for supplier selection will be critically appraised to ensure that adequate clarity and weighting is given to issues such as quality, service levels, total cost in use/lifetime cost, and contribution to efficient healthcare, and impact upon competitiveness in the supply market
- The information within category strategies is commercially confidential to the sector, and should be treated in the same way as supplier specific commercial information. However, those aspects of the strategy which promote the principles of fairness, access, and competition, for example the selection criteria, specifications, and demand information, should be disclosed at the appropriate point in the process
- Where responses to tenders and quotations are considered to lack real competitiveness, the reasons will be investigated. If, for example, suppliers perceive a lack of commitment to use the forthcoming contract, or they consider the specifications to be skewed in favour of a competitor, clarification discussions will be held with all the relevant suppliers to address the issues, and reset the commercial basis. (Procurement staff will have access to the appropriate legal advice when dealing with such issues)
- Sector level representation will be geared towards ensuring that reverse e-auctions and other forms of electronic tendering become accepted practice

3.2.3.3.2 Contracting

Contracting formally concludes the commercial arrangements and expectations of the supplier and customer. Contractual terms should reflect appropriately the key performance measures and service levels which underpin the arrangements, and the consequences of non-performance for all parties. The terms should also encourage co-operative working and supplier development, when such approaches have been deemed desirable within the category strategy and tendering processes

- Procedures for tendering and quotations are geared towards transacting business on standard terms specified by procurement, rather than the suppliers terms, with tight control over when and by whom such terms are varied. Standard terms will be maintained at sector level, to avoid duplication, and to facilitate those categories to be managed on a sector basis
- Contracts at a sector level will reflect the legal obligations of all the parties, and will ensure clarity of responsibility across the hospitals/units who have combined forces
- Consideration will be give as to how any potential default – by supplier or customers – will be handled, in addition to specifying who has responsibility for overall contract management.

Issues such as committed volumes, payment terms and procedures, and apportionment of discounts across the customer base will be clearly addressed
- Contract duration periods should be considered in the context of their impact upon competition, efficiency, and propensity for suppliers to invest on behalf of the health service
- Contract approval and signatory procedures will be maintained in line with the standing instructions for each of the Boards, with separate procedures covering sector and national contracts
- The use of "call-off" contracts is to be encouraged as a means of improving efficiency, in those situations where procedures allow adequate control and audit trails
- The used of tightly agreed contractual terms should not be permitted to act as a barrier to developing supplier partnerships in those situations where working to mutual benefit is seen as a significant opportunity – within the category strategy. Such situations incorporated into the tendering process, so that mechanisms for the joint sharing of benefits, and for improvement plans, can be accommodated

3.2.3.3.3 Supplier Performance Management

Supplier performance management involves the proactive use of key service level performance indicators to help ensure that suppliers provide the required and agreed levels of service, cost, and quality. Supplier performance management is also an integral part of building supplier relationships which deliver continuous improvement within the contractual framework

- Key Performance Indicators (KPI's) and service level targets will be incorporated into contractual arrangements where practical, along with a review mechanism within the supplier/contract management process. These measures will reflect those parameters which are the most important in achieving high quality, efficient, and cost effective patient care. Examples might include:-
    - Percentage reduction in agreed lead time
    - Percentage deliveries on time
    - Percentage orders delivered complete
    - Percentage price reduction during contract duration
    - Incidence of complaints about quality
    - Percentage queried invoices
    - Response to emergency requests
- Determining the sources of data which are to inform the KPI's must be an integral part of the process
- Critical KPI's should, where possible, be contractually binding, together with consideration as to the desirability of penalties/incentives commensurate with the risks and consequences involved
- Responsibility for coordinating supplier performance management should be determined within the category strategy, and allocated at the same level – hospital/board/sector – as the level at which the contracts are awarded
- This individual is responsible for communicating with the customers/users and other stakeholders involved in using the products and services, and for coordinating the formal review process with the supplier
- Such a review process will also provide an input for supplier development programmes, in those relationships which are designated for a partnership approach – within the category strategy

3.2.3.3.4 Procurement Policies

The health service procurement policy sets the charter of behaviour which drives successful procurement practices and processes. The policy underpins the high level objectives, responsibilities, and legal and ethical requirements of all the parties involved in procurement

- Procurement policies, practices, and processes will help provide a supply infrastructure which minimises transaction costs, and provides the optimum products and services in support of effective and efficient patient care
- The existing health service policy document will be used as the basis for moving forward. The policies will be developed and refined to cover existing and planned procurement strategy initiatives, such as those supporting e-procurement and supplier development
- All individuals involved in multi-functional teams responsible for developing and implementing category strategies will be responsible for promoting policy compliance
- Procedures covering all aspects of policy implementation will be developed and maintained, including the standardisation of procurement documentation

Recommended Actions – Sustainable and Competitive Supply Base

1. HSPU to carry out procurement information requirements analysis, identify solution options (e.g. data warehouse) and drive the implementation of a Health Sector Procurement Information System(s) which would facilitate quantitative analyses drawn from transactional data, including
   - Comparative product expenditure and volume usage at sector, board and institution level
   - Historical price trends
   - Supplier performance information
2. HSPU to carry out information requirements analysis, identify solution options and drive the implementation of a Health Sector Procurement Knowledge Repository which would contain or provide access to qualitative information derived from various internal and external sources, regarding areas such as
   - Contracts in place
   - Demand information from Service Plans and capital expenditure plans
   - Supplier and market information
   - External cost and price benchmarks
3. HSPU to carry out information requirements analysis, identify solution options and drive the implementation of a Health Sector Product Information Library which would contain or provide access to information derived from various internal and external sources, regarding products, specifications and their application, and experience gathered from usage in the Irish health sector, together with the relevant published technical information.
4. HSPU to develop and implement a strategy to facilitate communication between procurement practitioners to share and develop experience
5. HSPU to design and implement a programme for the continued development and roll out of standard terms and conditions to be used in the contracting process
6. HSPU to establish standards for supplier performance measures and targets for inclusion in service level agreements.
7. HSPU to design and implement a programme for the development of standards and best practice approaches for tender management and evaluation.
8. HSPU and Boards to appoint expert specifiers and clinical pharmacists who will assist in providing information on products and alternative treatment regimes to clinicians
9. HSPU to facilitate health boards in developing and implementing policies to effectively manage the access by suppliers to medical staff, nurses and core service providers.
10. HSPU to liaise with the national eProcurement initiative in establishing a common register of health sector suppliers incorporating standard information
11. HSPU to produce a set of policies and procedures for suppliers doing business with the health sector

3.2.4 Optimised Supply, Inventory and Logistics Arrangements

3.2.4.1 Vision

The logistics infrastructure is the series of physical channels down which products will flow from supplier to point of use. The processes of inventory management, picking to required quantities, consolidating different products for users, and transportation are included. Internal supply chain arrangements within hospital sites and community care centres include the configuration receipting points, the arrangements for unloading, the method on transporting products to their point of use, and the local storage arrangements prior to the products being used.

The design of the infrastructure has a big influence on total cost, and can influence the optimal point at which to access the inbound supply chain – manufacturer, wholesaler, agency etc.

The strategy envisages that in 5 – 7 years time

- Responsiveness of local delivery arrangements will optimised be in order to contribute to more efficient patient care.
- Opportunities for integrated or shared logistics and inventory arrangements across the sector as a whole and between boards and institutions will be maximised
- Access to the inbound supply chain will be at a point which generates maximum value for the Health Sector, supported by the appropriate inventory and logistics arrangements
- Service level agreements will be in place and used for performance management for all contracts

3.2.4.2 Key Principles

- The health sector should minimise inventory and logistics costs while ensuring optimised responsiveness of local delivery arrangements by adopting techniques such as outsourcing, supplier managed inventory, consignment stocking and other available approaches. Total inventory and logistics costs, including transportation, inventory holding costs, order picking and consolidation, batch and shelf life tracking, obsolescence, wastage and leakage, etc. should be taken into consideration.
- Appropriate contingency arrangements and disaster planning should be incorporated into any strategies adopted for shared, centralised or outsourced arrangements
- Outsourcing should be considered as an option for all significant shared inventory or logistics initiatives
- Consideration should be given to the possible benefits of separating out contracts for the purchase of supplies from those for the delivery and logistics aspects.
- Where economically advantageous, automatic replenishment of regularly used ward supplies should be implemented using techniques such as bar coding and hand held data capture equipment, and eProcurement to generate requisitions automatically

3.2.4.3 Key Recommendations - Procurement Practices and Processes

3.2.4.3.1 Logistics Infrastructure and Inventory management

- A study will be carried sector logistics strategy and implementation plan will be developed to take the benefits of opportunities for , for both the acute sector, and community care,

- An integrated approach for logistics and inventory management for appropriate categories will be implemented at national level, building upon the existing and planned arrangements within boards and agencies.
- Providing a sector wide logistics infrastructure – i.e. a network of storage and delivery points -- will enable products which are commonly used from a range of regional and national suppliers to be consolidated together for inventory management and transportation. Products can then be picked and delivered direct to requisition points in hospitals, and community care centres, according to need
- This also will provide the opportunity to move to a ward box service, or similar, whereby all the necessary stocked products for a given user are delivered to requisition points in a reliable and predictable way, backed up by a single receipts transaction and consolidated invoice. This ensures the necessary product availability at the point of use, without the current excessive involvement of nursing and medical staff in routine purchasing activities
- This will avoid the need to clutter up hospital sites and community care centres with stores of frequently used products, and avoids the costs and nuisance associated with fragmented delivery arrangements, and the cost of running more stores than necessary
- Where appropriate, it also encourages the use of sector wide purchasing arrangements with concomitant benefits in terms of leveraged buying power and savings in transportation and inventory costs

3.2.4.3.2 Internal Supply Chain Arrangements

- Each board/hospital will implement a local strategy for internal supply chain arrangements, starting with the recognition of the opportunities resulting from the sector wide logistics strategy, and building upon the existing and planned arrangements. The local strategy will address:

    - local material movements and inventory requirements, including the opportunity to combine the various activities – stock, direct supplies, laundry, catering, etc
    - the ward box delivery concept, for commonly used products, theatre packs etc
    - appropriate delivery, and internal supply chain arrangements
    - responsibilities and processes for replenishing and topping up at user points, taking advantage of available technologies such as bar code scanners, and repeat ordering techniques
    - the possible benefits off-site consolidation to reduce the frequency of deliveries on congested sites

Recommended Actions - Optimised Supply, Logistics and Inventory Management Arrangements

1. HSPU to carry out a high level review of existing practices in logistics, inventory management and internal supply chain across the sector, and facilitate the extension or replication where appropriate of identified best practice to other boards.
2. HSPU to carry out a study to identify and evaluate opportunities across all categories of procurement for cooperation across boards in logistics and inventory management and internal supply chain initiatives.
3. HSPU to identify and, where appropriate, facilitate the piloting by boards of key improvement concepts such as distribution centres, offsite consolidation, ward boxes etc.
4. Boards to develop board level logistics, internal supply chain and inventory management strategies taking into account any cooperative initiatives planned.

4 Key Performance Indicators and Targets for the Strategy

4.1 Introduction

We set out below an illustration of the measures which can be used to determine the progress in achieving each how component of the vision, and suggested targets which should be achieved over the 7 years of the implementation of the strategy. Most of the targets below are non-financial and do not result directly in savings. There are four which do:-

	Revenue	Works (Repair & Maintenance)	Capital Works
Unit Cost Reduction	3% of Total Expenditure	3% of Total Expenditure	0.5% of Total Expenditure
Transaction Cost Reduction	25% of Total Transaction Costs	25% of Total Transaction Costs	0.25% of Total Expenditure
Logistics savings	0.5% of Total Expenditure		
Reductions in transaction numbers	15% of Total Transaction numbers	15% of Total Transaction numbers	

Savings and benefits targets have been established from published information and actual data arising from a range of assignments involving the implementation of portfolio strategies, category strategies, logistics strategies, and e-procurement projects in a variety of sectors. Examples of these are set out at Appendix J.

The primary benchmark has been the savings target for influencable non-pay expenditure in the NHS in England, which has been set and achieved. This is currently 3% for each year. Logistics costs in England have also reduced by up to 10% depending upon category, as a result of implementing the national logistics infrastructure.

In developing the proposed targets, account has been taken of the particular circumstances which prevail in the health sector which impact upon the extent of benefits which can be achieved, and the timescales required. These include:

- The complexity of the products and services used, and in particular the unique nature of service and quality, and their influence on patient care provision
- The complexity of the organisational arrangements
- The nature of the supply base
- The effects of legislation

It is our view, based on numerous examples from other organisations, both in the public and private sectors, that the financial targets proposed represent reasonable and achievable goals. These targets are strongly recommended, and form the basis for the savings projected (see Section 7).
It is imperative, of course, that the required funding is provided, if the targets are to be achieved.

The remaining targets are designed to provide indicators of progress against the achievement of the vision. While it is our view that they are reasonable and could be used to monitor the implementation of the strategy, nevertheless it is important that they should be reviewed and refined as appropriate by the HPSU and the boards in the development of the performance management framework.

It is important also to point out that, while it is essential to have quantitative and qualitative targets and systems of measurement, there is a risk that the measurement systems and processes would in themselves become a major programme of activity and would act as an obstruction to real progress in improved procurement. For this reason, we have proposed systems of measurement which are, in general, based on regular surveys and sampling rather than ongoing comprehensive measurement systems. Details of some of the approaches recommended are set out in Appendix B (Unit Costs), C (Transaction Costs), and D (User Satisfaction).

The Key Performance Indicators and targets proposed for each element of the vision are set out in the table below. It is envisaged that a set of the main Key Performance Indicators (say the top 5) will be defined, and that they will be incorporated in the national set of performance indicators used for service planning. The others will be used by health agencies for internal performance management and to assist in the development of category strategies.

	Vision	Key Performance Indicator	Target to be achieved by Year 7 (2009)
Leveraged Buying Power	There will be a fully integrated sector-wide framework in place for the management of procurement at individual board and sector level, based on a portfolio and category management approach, in order to maximise buying leverage	Percentage of total sector non-pay Expenditure covered by comprehensive category strategies	1. 80% of total sector non-pay expenditure covered by comprehensive category strategies at sector or board level
		Real reductions in unit cost for all supplies, services and works.	2. 5% real reductions in average unit cost. Measured by survey for a pre-specified basket of goods services and works). (repair and maintenance) 3. Reduction of 0.5% of total capital works expenditure
	The proportion of all non-pay expenditure which is subjected to real competition in the supply base will be maximised, and the management infrastructure will be	Percentage of total non-pay expenditure procured under contract	4. 90% of non-pay expenditure procured under contract
		Percentage of total sector non-pay expenditure procured under conjoint contracts	5. 60% of total sector non-pay expenditure procured under conjoint contracts at board or sector level

	Vision	Key Performance Indicator	Target to be achieved by Year 7 (2009)
	engaged to ensure compliance with contracts which have been put in place with chosen suppliers	Percentage of non-pay expenditure procured off contract where contracts exist	6. Less than 5% of non-pay expenditure procured off contract where contracts exist
	Demand will be aggregated, as part of a coordinated strategy, to the highest level which is supported by a sound economic rationale	Percentage of total Sector non-pay Expenditure procured under conjoint contracts	7. See 5 above
		Real reductions in unit cost for all supplies, services and works (repair and maintenance)	8. See 2 and 3 above
	Professional procurement expertise and practices, as well as the appropriate technical, clinical, and stakeholder inputs, will be applied to the sourcing and contracting of all major categories of external expenditure	Percentage of total Sector non-pay Expenditure influenced/managed by a professional procurement function	9. 95% of total sector non-pay expenditure influenced/managed by a professional procurement function
		Clinician/other service provider level of satisfaction with products and services procured	10. Increase in clinician/other service provider level of satisfaction with products and services procured. Target to be set following baseline survey.
		Success in rationalising the number of different products in use for the same purpose	11. Target changes to numbers of products per category to be included in each category strategy
		Success in rationalising the number of suppliers per category of expenditure	12. Target number (defined in each category strategy) of suppliers who represent 80% of expenditure in that category/subcategory 13. Annual rate of reduction of the total cumulative number of suppliers representing 80% of expenditure in all categories. Targets to be developed by the health sector, taking into account the need to maintain a sustainable supply base.

Maximised Transaction Efficiency	The number of transactions to be processed will be reduced as a result of reduction in ad hoc (off contract) purchasing, improved logistical arrangements, reductions in rework resulting from errors	Number of transactions required to complete the requisition to payment process per million Euro of expenditure	14. 15% reduction in the number of transactions (requisition to payment) per million Euro of expenditure across the sector.
	The use of eProcurement facilities will be maximised	The proportion of procurement transactions supported by electronic catalogue and ordering facilities	15. 40% of procurement transactions supported by electronic catalogue and ordering facilities
		The proportion payments transacted electronically	16. 95% of payments transacted electronically
	Transaction processes for routine procurement activities will be streamlined and automated as far as possible	Cost per transaction of staff time (medical/nursing staff and administrative staff) required per transaction for routine procurement activities (requisition to payment)	17. 25% reduction in average cost per transaction (repair and maintenance) across the sector. 18. Reduction in transaction costs equal to 0.25% of total expenditure for capital works

Sustainable and Competitive Supply Base	Unit cost levels will be consistent with national and international benchmarks, where comparisons are feasible and appropriate	Unit cost levels for supplies services and works	19. Unit cost levels overall for comparable products services and works will not be significantly greater than national and international levels. Measured by carrying out periodic surveys based on a 'basket of goods' approach.
	Unit cost levels will be reducing in line with the effects of increased competition and resultant efficiencies in the supply base	Real reductions in unit cost for all supplies, services and works (repair and maintenance)	See 2 and 3 above
	Supplier access to the health sector market will be enhanced, thereby facilitating greater competition	Percentage of sector expenditure procured by public tender	20. 90% of sector expenditure procured by public tender, either through public notice, eTenders or OJEC
	Appropriate supplier relationships will be developed, including supplier partnerships where this will encourage suppliers to invest and develop their services in ways which give gain to the Health Sector	The percentage of suppliers with whom the sector has signed contracts incorporating formal supplier partnership development programmes	21. Contracts incorporating formal supplier partnership development programmes signed with 10% of key suppliers
		The percentage of suppliers with whom the sector has signed contracts incorporating formal risk and gain sharing arrangements	22. Target to be developed by Health Sector
		Percentage of all contracts (where applicable) which include formal service level agreements in compliance with sector standards	23. 100% of all contracts (where applicable) to include formal service level agreements in compliance with sector standards
	Category strategies will be designed to help sustain the right number of competitors in the supply market, with the appropriate apportionment of business across suppliers designed to encourage long term competitiveness in the supply market	The number of instances in which tender competitions result in insufficient suitably qualified and fully competitive bids	24. Annual reduction (tracked by survey) in the number of instances in which tender competitions result in insufficient suitably qualified and fully competitive bids. Target to be set following baseline survey.

	Information will be shared across agencies to help support and stimulate competitive supplier behaviours and responses	Extent to which the sector level information databases are successfully populated and used	25. Targets to be set in the relevant systems projects, following baseline survey.

Optimised Supply, Inventory and Logistics Arrangements	Responsiveness of local delivery arrangements will optimised be in order to contribute to more efficient patient care.	The satisfaction levels of patient care and other service providers with the service levels achieved	26. Overall satisfaction levels of patient care and other service providers as measured by survey. Targets set following baseline survey
		Percentage success in meeting targeted service levels as per service level agreements	27. 98% of requisitions/orders delivered on time and in full to the right quality standards
	Opportunities for integrated or shared logistics and inventory arrangements across the sector as a whole and between boards and institutions will be maximised	Total logistics costs, including transportation, inventory holding costs, order picking and consolidation, batch and shelf life tracking, obsolescence, wastage and leakage	28. 5% reduction in total logistics costs. Target and measurement approach to be confirmed as part of the sector logistics strategy
		The satisfaction levels of patient care and other service providers with the service levels achieved	See 23 above
	Access to the inbound supply chain will be at a point which generates maximum value for the Health Sector, supported by the appropriate inventory and logistics arrangements	"Total Cost in Use" per category of product	29. Targets to be set in the relevant category strategies
	Service level agreements will be in place and used for performance management for all contracts	Percentage of all contracts (where applicable) which include formal service level agreements in compliance with sector standards	30. 100% of all contracts (where applicable) to include formal service level agreements in compliance with sector standards

5 Organisation and Management Recommendations

5.1 Overview

One of the key enablers of the vision for procurement in the Health Sector is the establishment of the most effective organisation structures at Health Board and Sector level. Changes are required in the way procurement is organised and structured across the Health Sector to promote effective procurement practices.

We set out below a vision for an organisation and management framework to support the most effective use of health sector funds and the provision of a high quality of service to patient care providers. This vision is one which the sector should work towards, and we would envisage that the complete framework should be in place within two to three years if the objectives and targets of the strategy are to be met.

There are a number of key factors dictating the need for change in the way procurement is organised and structured within the Health Sector. Some of these are outlined below:

- The need to promote and foster a value for money culture in procurement
- The need for leadership and commitment from senior management in delivering the vision for procurement across the sector;
- The need to clearly define, co-ordinate and measure responsibility for procurement performance across all non-pay expenditure at Health Board and Sector level.
- The need to develop and implement strategies which leverage the buying power of the sector to ensure the most effective use of funds available, while delivering the required levels of quality and service to provide effective support for patient care;
- The need to create organisational arrangements that raise the profile of procurement to better allow it to act as a strategic support function at Board and sector level;
- The provision of enhanced focus and co-ordination in promoting co-operation and combined procurement across the Health Sector while ensuring that local needs are met;
- The need to promote the most effective approach to the development and implementation of portfolio and category management strategies at sector and board level;
- The need to develop organisational arrangements that facilitate the development and implementation of the most effective approaches to logistics management at sector and board level;
- The need to develop a performance management culture to ensure that on-going procurement performance is monitored and measured at Board and Sector level in line with agreed plans and performance measures;

The foregoing factors indicate a necessity for organisational change across the Health sector.

5.2 HeBE

The recent establishment of the Health Boards Executive (HeBE) is a positive step in terms of providing a senior management platform to promote and develop co-operation and cross working between Boards. The potential for HeBE in this regard to act as top-level drivers for the procurement vision is considerable.

One of the key ways in which this sponsorship of the procurement vision can become tangible is through the agreement and implementation of a range of procurement performance measures related to the implementation of the vision.

Performance targets set for procurement in the sector will be agreed by HeBE and committed to by the CEO of each health board. CEOs will be required to drive and support effective procurement practices within their Boards and to report on performance against targets. Procurement performance across the sector will be a regular agenda item at HeBE meetings. Progress against targets will be reviewed and actions will be agreed to address areas where performance targets are not being achieved.

5.3 Sector Level Structures

It is an underlying principle of our recommendations that there should be a single integrated management framework for procurement across the whole health sector. The structures described below are intended to ensure that this is achieved.

A new discrete, dedicated and properly resourced Health Sector Procurement Unit (HSPU) should be established. Its role will be to work with procurement and other professionals across the sector to define procurement strategy and policies and to support, co-ordinate and oversee their implementation.

The HSPU will be responsible for the overall effectiveness of procurement across all areas of non-pay expenditure in the Health Sector, including the regional Health Boards, the ERHA, the Voluntary Hospitals and the GMS. It will be an integral part of the Health Boards Executive (HeBE), and will report to the HeBE Chief Executive. It should act as a support mechanism to procurement structures in place at Health Board level.

HPSU will proactively integrate with broader public procurement sector initiatives at National (in particular the national eProcurement strategy), North/South, and EU levels.

The key roles envisaged for the HSPU are set out below: *It should be noted that all of the role descriptions set out in this section are at a high level. One of the key steps to be taken following the approval of the strategy will be to develop detailed job descriptions and candidate profiles for each of the positions recommended.*

5.3.1 National Head of Health Sector Procurement (NHHSP)[2]

The objective of this role is to provide strategic leadership to the HSPU and the wider Health Sector in developing and implementing effective procurement across the sector. The role is responsible for the

[2] All of the job titles used in this document are working titles only. Formal titles will need to be determined as part of the implementation process.

effectiveness of procurement across the health sector, is accountable to HeBE and will report to them on progress against agreed targets on a regular basis.

The main responsibilities are:-

- Co-ordinate the development of sector procurement policies and initiatives
- Set a balanced scorecard of procurement performance targets for the Health Sector
- Monitor and facilitate progress in relation to implementation of effective procurement in the sector
- Review the efficiency and effectiveness of the sector level procurement initiatives
- Review the economic impacts of sector initiatives and report to HeBE on progress against agreed targets

The NHHSP will be someone with sufficient seniority and credibility to effectively influence the procurement environment in the Health Sector**.**

Because of the distinctive aspects of the procurement of drugs and medicines in the context of medicines management, the role of the NHHSP in this regard will be different to that for other categories. Specific responsibility for the effectiveness of procurement in this area will rest with a new position of National Head of Drugs and Medicines Procurement (NHDMP) described below. The role of the NHHSP will be to work jointly with the NHDMP to ensure that

- Effective procurement strategies are being implemented for drugs and medicines
- Integration opportunities between drugs and medicines and other categories of procurement are effectively exploited to the benefit of the sector as a whole
- Best practices in procurement are promulgated in the area of drugs and medicines, in particular in the tendering and contracting process
- Integrated procurement expenditure analysis and performance information is available to the HSPU

5.3.2 National Portfolio and Category Manager

The objective of this role is to ensure an integrated approach to sourcing and contracting for all categories of procurement across the health sector.

The main responsibilities are:-

- Development and maintenance of sector level portfolio strategy
- Co-ordination of the development and implementation of category strategies for sectorally managed categories
- Development and management of sector level contracts
- Development and communication of procurement policies, guidelines, standards and best practice
- Liaison with public sector-wide procurement initiatives

This role will be carried out in close co-operation with new health board procurement functions described below, and many of the initiatives will involve the use of multi-function teams drawn from across the health sector.

Dedicated professional resources will be required to manage certain key categories of procurement designated for sector level management. Because of the distinctive aspects of the procurement of Drugs and Medicines in the context of medicines management, it is envisaged that this will be one of these categories, and that it will be managed by a pharmacist – the National Manager for Drugs and Medicines (as outlined below).

5.3.3 National Manager for Drugs and Medicines Procurement

A dedicated pharmacist will have responsibility for the effectiveness of the procurement of all drugs and medicines in the sector, including the GMS. This role will involve working with pharmacists and procurement professionals across the sector to identify opportunities for sector level initiatives, and to ensure that best commercial practices are implemented in the procurement of drugs and medicines.

The main responsibilities are:-

- Ensuring the overall effectiveness of procurement of drugs and medicines at a sector level
- Developing and implementing category management strategies at sector level for the procurement of drugs and medicines
- Managing the specification, tendering and contracting processes for sector level procurement of drugs and medicines
- Facilitation and promotion of enhanced co-operation among pharmacists across the sector
- Identifying opportunities for standardisation and rationalisation of products purchased
- On-going monitoring of procurement of drugs and medicines across the sector, and provision of performance management information to the National Head of Health Sector Procurement
- Working jointly with the NHHSP, the National Portfolio and Category Manager and other HSPU professionals to ensure that integration opportunities between Drugs and Medicines and other categories of procurement are effectively exploited, and that integrated procurement expenditure analysis and performance information at sector level is available to the National Head of Health Sector Procurement

5.3.4 National Logistics and Inventory Manager

The objective of this role is to promote standards and best practice in logistics and inventory management across all categories of procurement in the health sector, and to ensure that opportunities for co-operation across agencies and boards are identified and effectively exploited.

The main responsibilities are:-

- Development and maintenance of health sector logistics and inventory management strategies
- Facilitating the development of plans for the implementation of co-operative logistics and inventory initiatives across boards
- Management of any sector wide operational logistics facilities established
- Development and communication of policies, standards and best practice for logistics and inventory management
- Co-ordination of and support to board procurement functions in the development of regional procurement and logistics strategies
- Liaison with public sector-wide logistics initiatives

5.3.5 National Manager - Information & Technology

The objective of this role is to ensure that appropriate information systems and technology are in place at sector level to support the implementation of best practice procurement in the sector.

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The main responsibilities are:-

- Developing and implementing, in consultation with the heads of other related HeBE technology programmes (e.g. FISP), a sector level technology framework for procurement including the development and maintenance of common coding and classification standards
- Ensuring that ICT requirements relevant to procurement are encompassed in the implementation of the National Health Information Strategy, and in related HeBE ICT action plans.
- Maintaining an information repository for the sector which will contain and provide access to product, technical, market and other research information
- Providing, managing and operating sector level procurement systems where required
- Ensuring co-ordination with national e-Procurement initiatives and effectively implementing the national public sector e-Procurement Strategy in the Health Sector.

5.3.6 National Manager - Training, Change Management & Communications

The objective of this role is to effectively manage the transition to the new procurement environment in the sector by providing strategic focus around training, change management and communications.

The main responsibilities are:-

- Creating and implementing training and development initiatives aimed at developing and maintaining procurement skills across the Health Sector, including working with the Office for Health Management to ensure the inclusion of appropriate procurement training for health professionals.
- Promotion and marketing of procurement as a strategic support activity
- Develop communication and awareness programme to ensure key stakeholders, providers of patient care, and core support services understand and support the principles behind the proposed approach to procurement
- Change Management support for procurement across the sector to include the development of change management plans, communications plans, awareness initiatives etc;
- Facilitating effective communications between procurement practitioners across the public sector.

5.3.7 Centre of Excellence

The HSPU will contain, or have access to, a range of clinical and other technical experts who will support users and clinicians and core service providers across the sector in the development of technical specifications.

The main responsibilities of the Centre of Excellence are:-

- Provision of specialist procurement and legal advice and to support sector-level initiatives and to ensure consistency in the advice provided at board and local level;
- Provision of expert advice and assistance from clinicians / pharmacists / nurses acting as "expert specifiers" liaising with clinical and other specialist users, clinical networks, drugs and therapeutics committees, core service providers, procurement, and all other stakeholders including suppliers. Their function will be to fully understand product capabilities and alternatives in order to help identify alternative options which promote more efficient patient care or core service delivery. These positions will need to be at a level sufficiently senior to enable them to interact effectively with clinicians and senior medical and nursing personnel.

Their introduction will need to be supported with a significant programme of training and awareness aimed at clinicians and other medical personnel who need to be involved in specification and selection processes.

- The provision of a central system-based repository of information to support and inform the development of specifications.

Over the longer term, this Centre of Excellence could evolve into a separate agency along the lines of similar initiatives in the UK and elsewhere.

5.3.8 HSPU Staffing Approach

It is envisaged that the HSPU will comprise a small core of permanent staff supplemented where required by secondees from elsewhere in the sector, or by skills contracted in from the private sector. The detailed structures, roles, responsibilities and resourcing requirements should be defined as part of the implementation of this strategy.

In the short to medium term the not all of the functions for the HSPU outlined above necessarily require dedicated positions. The HSPU should be a small, strategically focused unit that grows organically in line with the implementation of the Health Sector Procurement Strategy.

A balance also needs to be struck, however, to ensure that the HSPU is not under-resourced. If this were to become the case there is a significant risk that the HSPU would act as a burden to procurement in the sector, in particular to Health Board Procurement functions, rather than the support infrastructure it is supposed to be.

5.4 Health Board Structures

We set out in the following paragraphs a proposed structure for procurement at Health Board level. The recommendations apply equally to other parts of the health sector (e.g. Voluntary Hospitals, ERHA) which do not follow the normal regional health board structure. The details of how they should be applied in these other areas should be determined by the HeBE in conjunction with management in those areas.

In order to maximise the effectiveness of procurement and its contribution to patient care at Board level, it will be essential to have appropriate structures in place. The actual responsibilities to be addressed at board level will reflect and support those set out at sector level. The health board will be responsible for its own overall procurement performance, supported by appropriate targets and performance metrics. In addition, it will be responsible for ensuring effective control of day-to-day procurement activities.

Each health board will have a signed off procurement strategy, developed with the support of the HSPU, which is in alignment with the Sector level strategy. The Board's procurement strategy will determine appropriate procurement organisational structures, staffing and responsibilities within the board.

It is not intended to pre-empt Board level procurement strategies by being overly prescriptive as to the organisational structures that Boards should put in place. Different boards are at varying stages of development in the implementation of effective procurement practices and organisational arrangements. Significant progress has been made in all boards, and some of them already have key elements of the proposed structures already in place. There are however, some organisational roles

which that should be in place across all Boards if the strategy is to be a success. These are set out below:

5.4.1 Regional Head of Procurement

Each Board will have a dedicated post of Regional Head of Procurement (RHP). This post will be at senior management level, equivalent to that of the heads of HR, IT, Technical Services etc. The RHP will take overall responsibility for the effectiveness of procurement in the Board, for ensuring the implementation of best practice in all procurement activities, and for ensuring the support of the board for health sector-level procurement initiatives.

The main responsibilities of the RHP are:-

- Developing and implementing board level procurement strategy and policies
- Developing portfolio strategies for the board in line with sector level portfolio strategies
- Ensuring that best commercial procurement practices are applied to all categories of non-pay spend across the board
- Setting a balanced scorecard of procurement performance targets for the board
- Monitoring and facilitating progress in relation to implementation of effective procurement in the board
- Reviewing the efficiency and effectiveness of the health board level procurement initiatives
- Reviewing the impacts of board level initiatives and reporting to HSPU on progress against agreed targets

Because of the distinctive aspects of the procurement of drugs and medicines in the context of medicines management, the role of the RHP in this regard will be different to that for other categories. Specific responsibility for the effectiveness of procurement in this area will rest with a new position of Regional Head of Drugs and Medicines Procurement (RHDMP) described below. The role of the RHP will be to work jointly with the RHDMP to ensure that:

- Effective procurement strategies are being implemented for drugs and medicines
- Integration opportunities between drugs and medicines and other categories of procurement are effectively exploited to the benefit of the board as a whole
- Best practices are applied in the procurement of drugs and medicines, in particular in the tendering and contracting process
- Integrated procurement expenditure analysis and performance information is available to the board

5.4.2 *Procurement* and Contracts Manager

Each Board will have a manager responsible for strategic procurement (category strategies, tendering and contracting etc.). It is envisaged that the level of sourcing carried out at board/sector level will be increased over time so that the role of materials management staff in hospitals/institutions can focus on internal supply chain arrangements and inventory management.

The Procurement and Contracts Manager will report to the RHP. Category managers/buyers will report to this position. The main responsibilities of the Procurement and Contracts Manager are:-

- Developing and implementing Health Board category strategies ensuring the effective management of board level categories

- Developing and managing Board level contracts
- Supporting other areas within the Board with a responsibility for procurement e.g. Drugs and Medicines, IT, Technical Services in the specification, tendering and contracting processes to ensure that appropriate procurement practices are in use, and that the commercial aspects of the processes are effectively addressed
- Ensuring compliance in the tendering and award of contracts in line with EU and Government legislation

5.4.3 Logistics and Inventory Manager

Each Board will have a manager responsible for logistics and inventory management. This role will report to the RHP. Staff involved in the operation of board level logistics and inventory facilities will report to this position. Non-board-level operational activities, including hospital internal supply chain arrangements and inventory management will be the responsibility of hospital/institution management, and the operational resources in this area will report to them.

The main responsibilities of the Logistics and Inventory Manager are:-

- Develop and implement Board level logistics infrastructure and inventory management strategies identifying Board level opportunities for logistics synergies
- Development of plans for the implementation of co-operative logistics initiatives within boards
- Management of any Board level operational logistics facilities established
- Supporting hospital/institution management in the implementation of best practices in relation to internal supply chain and inventory management, and in the recruitment, development and training of staff in this area.

5.4.4 Regional Head of Drugs & Medicines Procurement

Each Board will have a dedicated pharmacist at a senior level who will have responsibility for the effectiveness of the procurement of all drugs and medicines, including the GMS, in the Board's area. This role will involve working with pharmacists across the board's area and with the procurement function to identify opportunities for board level initiatives, and to ensure that best commercial practices are implemented in the procurement of drugs and medicines.

The main responsibilities of the RHDMP are:-

- Ensuring the overall effectiveness of procurement of Drugs and Medicines at a Board level
- Developing and implementing category management strategies for the procurement of drugs and medicines at Board level in alignment with sector level strategies
- Managing the specification, tendering and contracting processes for board level procurement of drugs and medicines
- Facilitation and promotion of enhanced co-operation among pharmacists in different hospitals / institutions
- Identifying opportunities for standardisation and rationalisation of products purchased
- Ensuring the effective involvement of pharmacists and clinicians in the specification and tendering process for drugs and medicines
- Ensuring the support of the board for health sector-level procurement initiatives in relation to drugs and medicines
- Ensuring the availability of information to facilitate awareness among clinicians and pharmacists of new drugs and medicines as they become available

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- On-going monitoring of procurement of drugs and medicines in the Board, and provision of performance management information to the Regional Head of Procurement
- Working jointly with the RHP and the Procurement and Contracts Manager to ensure that effective procurement strategies are being implemented for drugs and medicines, that integration opportunities between drugs and medicines and other categories of procurement are effectively exploited, and that best practices in procurement are implemented in the area of drugs and medicines

The level and reporting line for this position should be determined as part of the implementation of this strategy. In this regard, it may be appropriate, also, to take into consideration other factors relating to the wider context of Medicines Management.

5.4.5 Other Technical Experts at Board Level

Boards will appoint a range of technical experts, including clinical pharmacists and other clinical specialists, to support users and clinicians in the process of demand challenge, the development of technical specifications, and the aggregation of demand. Their primary role will be to ensure that objective knowledge of products and treatment regimes is provided to clinicians so as to reduce the influence of suppliers on their clinical preferences. It is envisaged that these technical experts will operate as part of the procurement team. Their levels and reporting lines would need to be defined as part of the implementation of this strategy, but it will be important that are at a level sufficiently senior to enable them to interact effectively with clinicians and senior medical and nursing personnel..

5.5 Implementation of the Organisational Framework

The implementation of the recommended framework should be driven by HeBE, and one of the early initiatives for the HSPU should be the development of a plan for the implementation of the organisational framework across the sector.

It is proposed that critical aspects of the organisational recommendations should be piloted to ensure that the new arrangements are implemented as effectively as possible. We would envisage that the complete organisational framework should be in place within two to three years if the objectives and targets of the strategy are to be met.

Many of the roles envisaged would constitute new positions within boards or at HeBE level, and will require an initial investment in order to achieve the benefits envisaged in the strategy. However, we would envisage that some of the roles could be filled by the refocusing of existing resources, freed up, for example, through increased efficiencies in the procurement process. Over the period of the strategy, therefore, we would envisage that the overall investment required for additional procurement resources will be significantly less than the costs of the new positions proposed here.

The cost benefit analysis set out in section 7 shows that the overall savings envisaged in procurement costs will significantly exceed the investment required for additional procurement positions.

5.6 Training, Change Management and Communications

An integrated approach to Training, Change Management and Communications will need to be put in place and maintained across the Health Sector to promote and support the development of the procurement skills sets and behaviours required to effectively deliver on the vision for procurement. This will represent a step change from the existing culture in these areas and this is reflected in the recommendation to appoint a dedicated manager at HSPU level with specific responsibility for training, change management and communications. This is a significant and important role and the post holder will have to work closely with colleagues in the HSPU, with Board level Procurement functions and with clinician and other healthcare professionals to enable the changes set out in the vision to become a reality.

5.6.1 Training and Development

Targeted training and development interventions for all key participants in the procurement process (clinicians, procurement professionals, pharmacists, expert specifiers etc.) will need to be developed and implemented across the sector.

Key skills areas to be addressed by the training programme should include, inter alia:

- The development and management of procurement portfolios. This includes the skills required to collect, aggregate and analyse high level spend data and how this links to the overall agency and/or sector objectives
- The development and management of category strategies. This includes skills in the following areas:
    - Detailed spend analysis;
    - Market analysis;
    - The development of sourcing strategies;
    - Negotiation and Contracting skills;
    - Supplier and Contract management;
    - Performance Management in relation to both process and individual performance management.
- The development and management of effective logistics management strategies
- The development of effective demand challenge skills among those procurement and healthcare professionals working with clinicians
- The development of product specification skills among procurement professionals, clinicians and other healthcare professionals

Specific procurement training and development programmes, based on the best practice procurement framework set out in this strategy, should be developed centrally at HSPU level, drawing on the expertise and front-line experience of Board level procurement functions. These programmes should be implemented in a co-ordinated and structured manner across the Health Sector.

The attainment of professional procurement qualifications among key procurement practitioners in the sector should be promoted, facilitated and encouraged. In this regard opportunities for link-ups with third level educational institutions and professional procurement bodies should be explored and developed.

5.6.2 Change Management and Communications

The procurement vision will require the implementation of significant culture change in the procurement environment at all levels across the Health Sector. Achieving this vision is substantially dependent on having an effective approach to managing this change process and in particular having robust mechanisms in place for communicating and promoting the changes proposed. The Manager - Training, Change Management and Communications within the HSPU will be responsible for developing detailed change management and communications plans to facilitate the change process across the sector.

Some of the key messages that this change management and communications programme must address include, inter alia:

- Increasing awareness on the benefits of the recommended procurement environment set out in this strategy across the Health Sector
- Promoting a positive attitude towards the new procurement environment among the key stakeholders in the process (health sector management, key healthcare professionals, procurement professionals, pharmacists, expert specifiers etc.), as well as suppliers to the health sector
- Promoting a Value for Money culture as a key dimension of the recommended procurement environment

5.6.3 Action Required

The Manager - Training, Change Management and Communications, once appointed, should prepare comprehensive plans for these areas as an early action. These plans should be drawn up in close consultation with colleagues in the HSPU and with Board level Procurement functions.

6 Systems & Technology Requirements

6.1 Introduction

The focus of this section of the report is to identify the technology and systems required to support the transition to the recommended procurement environment.

In recent years there has been a significant level of investment in enterprise resource planning (ERP) systems across the Health Sector. This has resulted in an upgrading of the procurement software applications in some Health Boards, with plans in place to eventually implement ERP systems across all Health Boards.

The strategy for technology and systems is set out under the following headings:

- Requirements:

  This will address the technology and system requirements to support the ***strategic, transactional and logistic*** procurement environment in an integrated fashion. The requirements will be supported via the provision of various systems and applications which aim to streamline processes and reduce transaction costs, whilst maximising the use of technology and systems to the advantage of patient care across all areas of the Health Sector. Key ***technology infrastructure*** requirements to support the integration of the systems and applications and facilitate the sharing of information across the Health Sector are also identified.

- Implementation Approach:

  We have identified those technology and system initiatives to be implemented to maximise the contribution of procurement in providing support for efficient and effective patient care. The initiatives should be viewed in the context of other existing health sector-wide initiatives including the implementation of standard financial, HR and logistics systems (ERP) across the sector, the Information and Communications Technology (ICT) Strategy and the Electronic Patient Record (EPR) initiatives.

6.2 Requirements

The requirement of technology and systems is to effectively and efficiently support the strategic, transactional and logistic procurement environment in an integrated fashion utilising technology to the advantage of patient care across all areas of the Health Sector including Community Care.

We have set out the requirements under the headings of

- Strategic Procurement
- Transaction Processing
- Logistics and Inventory Management

6.2.1 Strategic Procurement

The systems required to support strategic procurement – that is the preparation of category strategies, the analysis of requirements, preparation of specifications, the tendering and selection of suppliers, and the management of contracts are as follows:-

1. A ***Health Sector Procurement Information System(s)*** which would facilitate quantitative analyses drawn from transactional data, including
   - Comparative product expenditure and volume usage at sector, board and institution level
   - Historical price trends
   - Supplier performance information

2. A Health ***Sector Procurement Knowledge Repository*** which would contain or provide access to qualitative information derived from various internal and external sources, regarding areas such as
   - Contracts in place
   - Demand information from Service Plans and capital expenditure plans
   - Supplier and market information
   - External cost and price benchmarks

3. A Health ***Sector Product Information Library*** which would contain or provide access to information derived from various internal and external sources, regarding products, specifications and their application, and experience gathered from usage in the Irish health sector, together with the relevant published technical information.

4. ***A*** system ***to support electronic tendering***, including co-operative development of tender documentation, publication of tenders, receiving and evaluating electronic responses from suppliers, and publishing information in relation to awarding of tenders. The system should
   - Provide electronic templates for tender documents,
   - Maintain logs of suppliers who have downloaded documents
   - Provide clarification forum facilities to handle queries
   - Facilitate the payment of tender fees
   - Provide a full audit trail of file movements showing when tenders are issues, received and opened.

5. A contract ***management system*** specifically for works contracts. The system should link to external contract systems and support the exchange of data between sector project managers and contractors. This will enable:

   - Contract tracking for Works contracts
   - Performance measurement
   - Management of service level agreements.
   - Tracking of bills of quantity, payment terms and procedures, apportionment of discounts, duration periods, approvals and signatory procedures must be facilitated.

6. A Supplier ***Register*** which will capture basic information about all suppliers dealing with the health sector and avoid the same information being requested repeatedly from suppliers.

6.2.2 Transaction Processing

7. Electronic ***ordering systems*** are required which will facilitate the requisitioning and ordering of goods and services from catalogues based on contracts already in place with suppliers. They must enable staff to order from catalogues at sector, board or local level depending on where the contract exists, and must therefore be accessible across the sector. The systems will link to suppliers' systems to submit the electronic orders. They will need to be integrated with boards' financial and logistics systems so that transaction activity can be reflected there, and so that the ordering can be supported by automated workflow and appropriate authorisations and controls.

8. A Catalogue ***Management system*** will be required to support the electronic ordering process. This will enable the health sector to store and retrieve details of items available under contracts from suppliers, based on a standard coding and classification system which will be maintained and updated through the system. It should support a shared catalogue management facility which will be available to all sectors and be capable of extending across all categories of spend, including drugs and medicines. Catalogues should be capable of being managed independently of the eOrdering and ERP systems in use so that they can be accessible from a variety of systems.

9. Financial ***management systems in place or being planned*** must be deployed or modified to support new procurement-related features including:-
   - A standard coding system
   - Integration or interfacing with separate eOrdering and catalogue management facilities to link to suppliers' systems
   - Electronic invoicing from suppliers, including single monthly electronic invoicing with postings of expenditure details to appropriate budget centres
   - Automatic matching of orders, goods received and invoices
   - Electronic payments
   - The provision of transactional data and summary data in required formats to sector and board level databases or data warehouses for expenditure analysis and performance management and benefits tracking purposes

In general, it should be the policy to maximise the utilisation of standard financial and logistics systems (ERP) to support procurement, and ERP implementation teams should include procurement specialists. In addition, the needs and requirements for linking health sector procurement systems with broader public sector systems should be addressed.

6.2.3 Logistics and Inventory Management

Logistics and inventory management systems may be required to support some or all of the following features outlined in the strategy. The degree to which these features will need to be supported will be determined in the light of further work on logistics and inventory management strategies which are to be carried out at sector and board level.

If shared inventory facilities were decided upon, it is likely that they would be operated by or on behalf of the participating organisations by a new entity within the health sector, which would be set up to operate and manage such facilitie(s). The new entity would 'own' any inventories procured, would pay suppliers, and invoice participating organisations internally for goods ordered as well as any associated service charges or operating costs. To the participating organisations they would act as an internal 'supplier'. If the operation were outsourced, the systems would be provided by the outsourcing organisation. Otherwise they would need to be provided by the health sector.

If shared logistics facilities (e.g. delivery services), are decided upon, it is anticipated that they would be organised similarly to shared inventory facilities. The two could be set up as an integrated service. The entity set up to manage and operate the shared logistics service could be internal or external, but in either case would act like an external logistics provider. It would receive orders for goods from internal 'customers', collect the goods from the various locations concerned (manufacturers, distributors or internal shared warehouse) and deliver them on an agreed delivery cycle or special request to the 'customer' locations. They would pay suppliers for the goods and invoice the internal 'customers' for the goods and for the services provided.

10. In principle entities running such shared facilities would require systems to support

    - Transport and delivery management
    - Warehouse and inventory management for the facilitie(s) concerned
    - A full set of financial management capabilities including supplier payments and invoicing of internal 'customers'
    - eProcurement links to internal 'customers' to allow health staff to order, provide delivery instructions, track orders, and pay electronically etc.
    - Reporting on expenditure and contract usage to the HSPU as required

11. ***Existing and planned inventory management and logistics systems*** in the sector may need to be deployed or modified to support features such as

- A standard coding system
- Operation of service level agreements
- Supplier managed inventory
- Consignment stocking
- Ward box delivery, backed up by a single receipt and consolidated invoice
- Off-site consolidation
- Techniques such as bar coding and hand-held data capture equipment for ordering and automatic replenishment of regularly used ward supplies
- Facilitating an integrated view of inventory across the acute and community care sectors
- Providing management information to board or sector level databases/data warehouses

6.2.4 Technology Infrastructure Required

Certain infrastructure facilities will need to be put in place in order to support the delivery of the required applications described above.

A ***Standard Coding System*** is required to be selected and adopted across the sector. This is described in Appendix A

A capability for physical access to shared systems is required for all users. This requires that:-

- ***Suitable access devices*** – probably PCs with the appropriate configurations running Windows –are available on the desks of each user. It is assumed that these will be required for purposes broader than just procurement systems, and are therefore not included in cost estimates.

- A ***physical network*** with adequate capacity and connectivity for all users. It is assumed that this will be based on the government VPN or similar health sector initiative, and is therefore not included in cost estimates.

- A ***sector-wide intranet*** based on web technology and accessible to all users. This would comprise centralised hardware and software platforms which would provide users with browser-based access to central or shared applications (such as shared catalogues) either directly or via existing ERP systems. We would assume that this would be required for purposes broader than procurement, and is therefore not included in cost estimates.

- Running on the intranet, ***a health sector procurement portal*** which would be an internal web-site directing access to all available shared procurement applications and information.

Further infrastructural requirements to support the above vision are

- A ***content management framework*** which would determine standards and approaches for developing, publishing and updating information available through the health procurement portal. It is assumed that this will be based on the national public sector framework, which is being developed under the Reach initiative.

- A ***Security Infrastructure*** which would provide for robust authentication as well as authorisation functionality. The transfer of data between buyers, suppliers and banks requires secure communication channels to ensure confidentiality, non-repudiation and integrity. The potential for outsourced and/or hosted solutions increases the security requirements between these systems and any internally hosted systems to mitigate against and detect unauthorised intrusion. The security infrastructure and standards that can be provided as part of the Public Services Broker and any associated Trusted Third Party should be leveraged to provide the security infrastructure for procurement.

- ***Data Exchange Standards***, which should be developed in conjunction with the proposed Public Sector eProcurement Standards Working Group. Standards proposed should have widespread acceptance within the general software marketplace and endorsed by major standards bodies. Adoption of additional standards may be necessary to support the particular requirements of the health sector.

6.3 Implementation Approach

6.3.1 Systems Solutions Envisaged

It is envisaged that, in the long term, there will be a single standard set of systems in use for procurement across the health sector. Since a decision has been taken to implement SAP as the standard system for financial management, it would be desirable that this should, where appropriate, form the basis for meeting most of the requirements for procurement related systems.

Because of the potential for reduction or elimination of duplication, and because of the possibility of ongoing changes in structures in the health sector, and it would be desirable that serious consideration be given to the concept of systems being provided on a Shared Service basis at sector level where

appropriate. The HSPU should be responsible for implementing any sector level information systems envisaged.

The main components of the solutions envisaged are described below.

The ***Knowledge Repositories*** will comprise

- ***Health Sector Procurement Information System(s)***
- ***Health Sector Procurement Knowledge Repository***
- ***Health Sector Product Information Library***

The requirements analysis, solution design and implementation of the last two of these systems should be carried out in one project or a parallel programme, because the requirements are similar, and integrated or replicated solutions could be appropriate. The first system is likely to contain mainly financial and volumetric data, while the other two are more likely to contain primarily text and document based information. It is likely that the solutions for the first system will be based on data warehouse technology made available over a web-based intranet, while that for the other systems is likely to be based on a content management solution. Each of the systems should be owned, and managed at sector level, either by the HSPU, a related agency or by an external managed service provider.

The solution for the ***electronic tendering system*** should be a public-sector wide system based on the system proposed in the national eProcurement strategy, accessible via a public sector-wide intranet. The current eTenders system, operated on behalf of the Department of Finance, may form the basis of this solution. Existing solutions in some of the health boards should be taken into consideration in determining the appropriate sector solution.

A standard ***contract management system*** should be identified by the HSPU. As its primary functionality will relate to works contracts, this initiative should be carried out in conjunction with the Technical Services managers in the health boards and the Department of Health. Consideration should be given to systems currently in use in other sectors (e.g Conval in Local Government). Once selected, it is likely that it will be deployed in each board independently.

The ***Supplier Register*** should be based on the National Supplier Register initiative planned in the national eProcurement strategy, and the HSPU should liaise with the National Procurement Operations Unit (Dept. of Finance) in the design and development of this system.

A standard solution for ***electronic ordering*** based on SAP should be considered, as the relevant module of SAP is likely to represent the most appropriate solution for the eOrdering requirements once all of the agencies have SAP implemented for their financial management systems. This initiative will need to be carried out by the HSPU in conjunction with the HeBE SAP project, and it is critical that the HSPU and board procurement practitioners are involved in the definition of standard processes upon which the electronic ordering solution should be based.

Consideration should be given to the option of providing a sector level shared SAP system as part of this solution, rather than replicating the functionality across multiple boards and agencies. The applicability or otherwise of SAP to the pharmacy area, which currently uses separate, industry specific systems, would need to considered as part of this project.

It is unlikely, however, that SAP will be in place for financial management across all agencies in the sector for the next number of years, and it may be necessary, therefore, to provide eOrdering facilities which are not dependent on the widespread implementation of SAP. This could be achieved through an ***interim solution*** which would provide a centralised ***Standalone eOrdering*** facility separately, or as part of the Catalogue Management solution. It would be accessible via the health sector intranet and procurement portal, using web-based facilities. This would **not** be integrated with agencies' existing financial, inventory or logistics systems, but would provide data electronically in a standard format which would allow each agency to record details of transactions in those systems. Equally, it could provide limited facilities to enable orders to be transmitted from agencies' systems to suppliers. Control, authorisation and workflow facilities would be provided, but would be likely to be more limited than those available through an integrated system.

There is likely to be a strong case for outsourcing such an interim system to external providers who could provide a managed service with pricing based primarily on operating charges. In this way it should be possible to significantly reduce initial capital costs and to facilitate an early implementation. In identifying potential interim solutions, the health sector should take into consideration the need for compatibility with SAP in the future. The implementation approach should allow for piloting prior to widespread rollout.

The ***catalogue management system*** is likely to be operated as a central facility accessible through real time links from board and institution eOrdering systems. It may also need to provide copies of catalogues in various formats for the various ERPs and financial systems in use throughout the sector. This facility will also be responsible for managing and maintaining the standard coding system for the health sector, and for providing a service to the various boards and institutions for additions, changes and queries. The system will be located owned and managed by the HSPU, a related agency or an external managed service provider. A number of specialist providers exist in this area.. Access is likely to be made available using the health sector intranet and procurement portal, using and web-based facilities.

Projects to determine mandatory changes and enhancements required for existing and planned ***financial management, inventory and logistics systems*** in order to support the new procurement environment should be led by the HPSU in conjunction with the other ICT and financial management programmes in HeBE.

Systems solutions for any ***shared inventory*** or ***logistics facilities*** or ***shared transaction processing service centres*** should be considered as part of the feasibility studies related to those initiatives.

It should be recognised that the introduction of the technology and systems referred to above must in each case be accompanied by a programme of ***change management*** to ensure that the implementation can be effective in meeting the objectives and achieving the benefits envisaged. In particular, where standard or centralised systems are proposed, there will be a significant challenge to be faced in addressing the need for standardisation across the sector of associated manual processes, controls and documentation.

6.3.2 Actions

The actions set out overleaf are those required to provide the systems and technology solutions required to support the vision for procurement in the health sector. In general, the implementation of each initiative is a project which requires

- Analysis of requirements

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- Design of solutions
- Selection of implementers
- Implementation

More detailed descriptions of each of the projects is set out at Appendix I.

Recommended Actions - Systems and Technology

1. Electronic Ordering solution
2. Logistics and Inventory solution
3. Procurement Information System
4. Knowledge Repository and Product Information Library
5. Contract Management System
6. Standard Coding Framework
7. Catalogue Management Solution
8. Infrastructure for access to the procurement environment
9. Data Exchange Standards
10. Health Sector Procurement Portal
11. Electronic Tendering Solution
12. Supplier Register
13. Content Management Framework
14. Security Infrastructure

7 Costs Benefits and Funding

7.1 Introduction

In this section we set out the business case for the strategy, encompassing

- The identified costs of the initiatives and resources required
- The financial savings and other benefits envisaged
- Recommendations on the level of investment
- A recommended approach to funding the investment required

Many of the costs, in particular the costs of technology solutions, cannot be reliably estimated at this stage. Consequently, the approach taken to determine the level of investment to be allocated for the implementation of the national strategy has been

- Firstly, to identify the potential benefits, both financial and non-financial, achievable through improved procurement in the period to 2009;
- Based on these, to determine a level of investment, which could be justified to achieve the desired outcome.

The rationale used for determining the size of the fund required is set out in the following paragraphs.

7.2 Costs

Set out in Chapter 8 (The Way Forward) are descriptions of the initiatives recommended, including the setting up of organisational structures, the implementation of systems, pilot projects, and strategic studies.

The diagram overleaf sets out a high level summary of the cost estimates for implementing these initiatives. All costs are high level estimates and would need to be verified individually at the commencement of each project. Appendix I provides further information on the basis used for developing the estimates. The cost estimates include

- The costs of external resources required to carry out or assist in the studies and projects recommended. Internal resources costs for these projects are not included
- The resources costs (salary and overheads) for new positions recommended. For this purpose it is assumed that all of the positions recommended would require additional posts. In practice it is anticipated that, over the period of the strategy, the overall investment required for additional procurement resources will be significantly less than the costs of the positions set out here, as some of the roles could be filled by the refocusing of existing resources.

It is important to note that the costs shown are incomplete, as they omit the costs of the technology solutions required. Because of the degree of uncertainty in relation to the approach

to implementing technology solutions (e.g whether centralised or distributed), it is considered that technology costs could not be reliably estimated without detailed studies to define requirements, assess alternative approaches and design solutions. The costs of these studies are included.

Summary of Cost Estimates (Excluding Technology Solutions)

	2003	2004	2005	2006	2007	2008	2009	Total
Procurement	998	1,271	91					2,360
Organisation	303	121						424
Technology	1,437	1,240	1,059					3,736
Capital Cost	**2,738**	**2,632**	**1,150**					**6,519**
Procurement								
Organisation	1,605	3,598	6,225	6,536	6,536	6,536	6,536	37,574
Technology								
Operating Cost	**1,605**	**3,598**	**6,225**	**6,536**	**6,536**	**6,536**	**6,536**	**37,574**
Total Costs	**4,343**	**6,230**	**7,374**	**6,536**	**6,536**	**6,536**	**6,536**	**44,093**
Cumulative Costs	**4,343**	**10,572**	**17,947**	**24,483**	**31,020**	**37,556**	**44,093**	

7.3 Benefits

The benefits which will be achieved through successful implementation of the strategy are both financial and non-financial. These benefits are reflected in the strategic objectives, targets and key performance indicators proposed in Section 4.

7.3.1 Non-Financial Benefits

The non-financial benefits envisaged include

- Increased patient throughput and improved patient care arising from the more effective use of available funds
- Improved quality of service to patient care providers arising from more efficient and effective requisitioning and ordering processes
- Improved job satisfaction for patient care providers through reducing the amount of their time needed to be spent on procurement administration tasks
- Greater efficiencies in the supplier base as a result of improved and automated procurement processes for suppliers dealing with the health sector
- Significant contribution to overall national competitiveness as a result of the more effective use of funding for healthcare.
- Promotion of the use of eCommerce in the health sector and in the suppliers dealing with the health sector

7.3.2 Financial Benefits

The financial benefits projected can be summarised under four headings:

- Unit Cost reductions, reflecting reductions in the unit price paid for supplies works and services, arising from leveraging buying power and improved procurement practices;

- Transaction Cost reductions, which reflect lower administration costs within the public sector, arising primarily from standardisation, streamlining and automation;
- Logistics savings, reflecting reductions in costs for storage and delivery to the point of use;
- Transaction number reductions – reflecting more structured ordering processes.

The following table summarises the targets in relation to each of these. The spend-related percentage targets are set with reference to the budgeted / forecasted out-turn for FY2002 (see below):-

	Revenue	Works (Repair & Maintenance)	Capital Works
Unit Cost Reduction	3% of Total Expenditure	3% of Total Expenditure	0.5% of Total Expenditure
Transaction Cost Reduction	25% of Total Transaction Costs	25% of Total Transaction Costs	0.25% of Total Expenditure
Logistics savings	0.5% of Total Expenditure		
Reductions in transaction numbers	15% of Total Transaction numbers	15% of Total Transaction numbers	

The targets chosen are considered realistic and achievable. They are based on international research and experience and reflect the low end of the range of cost reductions claimed or projected by others in both the private and public sectors internationally.

Given that gearing-up in terms of organisation, resourcing, training and systems will take time, it is anticipated that benefits delivered over the period of the strategy will be back-loaded, with the most significant benefits emerging in the later years. It is envisaged that the targets will be achieved in full by the end of year seven of the strategy i.e. 2009.

7.3.3 Health Sector Expenditure

As the savings targets are based largely on percentages of overall health sector expenditure, we have developed an estimate for procured expenditure in the health sector for FY2002. The basis of our estimate, which has been verified by the Department of Health and Children, is set out at Appendix F. In summary, expenditure for FY2002 is estimated to be as follows:-

Revenue Expenditure €2.7 billion
Capital Expenditure €0.5 billion

Overall Procurement Expenditure. **€3.2 billion**

As these figures are approximations, we strongly recommend that the Department of Health & Children verify the actual out-turn numbers as soon as final results for FY2002 are confirmed.

7.4 Savings Projected

Based on achievement of the targets set out, using as a base the estimated health sector expenditure figures for 2002, the resultant savings have been projected. For the purposes of calculation, certain assumptions have been made

- the split of capital expenditure between Repairs & Maintenance and Works is 50:50
- Average transaction value (Revenue and Repair & Maintenance) = € 1,400

- Average transaction value (Capital) = € 20,000
- Average order transaction cost (All) = € 55.50
- The strategy will ultimately impact 100% of procured items within the health sector

The result is set out in the table below. In summary, achievement of the targets set in the strategy will achieve savings of **€146.4 million per annum** when the strategy has been fully implemented i.e. from 2009. Note the preponderance of savings delivered by reductions in unit costs (over 61%), although transaction-related savings account for almost 30% of the total.

BASELINE CASE	**Revenue** €' million	**Repairs & Maintenance** €' million	**Capital** €' million	**Total** €' million
Expenditure	2,704.4	248.3	248.3	3,201.0
Unit cost saving	81.1	7.4	1.2	89.8
Transaction cost saving	26.8	2.5	0.6	29.9
Logistics saving	13.5	0.0	0.0	13.5
Transaction nos reduction	12.1	1.1	0.0	13.2
TOTAL SAVING	**133.5**	**11.0**	**1.9**	**146.4**

7.5 Timing

The key assumption is that benefits will be delivered over a seven-year period. Within this timeframe, it is unlikely that savings will emerge in equal instalments – but will probably arise exponentially (e.g. subject to a learning curve – as knowledge and practice diffuse across the sector). In order to model this effect, savings have been phased in using a reverse "sum of digits" pattern [*This is an approach to depreciation, used to reflect loss of value early in asset lifetime. In this instance the method is reversed, in order to reflect benefit delivery later in the lifetime of the initiatives*]. The result is shown below.

	FY03 € Million	FY04 € Million	FY05 € Million	FY06 € Million	FY07 € Million	FY08 € Million	FY09 € Million	Total € Million
Total Savings	5.2	15.7	31.4	52.3	78.4	109.8	146.4	439.2

Thus, the envisaged savings will grow from **€5.2** million in 2003, the first year of the strategy, to **€146.4** million in 2009 (and the same figure annually thereafter), when the strategy has been fully implemented. Cumulative gross (non-discounted) savings over the period 2003 to 2009 are estimated at **€439.2** million.

7.6 Investment Recommendations

In order to produce the expected savings, an investment will need to be made (e.g. human resources, technology, consultancy). To determine the appropriate level of investment, we have used a

methodology to produce a breakeven scenario (i.e. savings equals investment) over the first three years of the strategy. The methodology, based on Net Present Value and Discounted Cash Flow concepts, is described at Appendix K. It should be noted that in order to determine the level of investment for the first three years we have used a high discount rate of 20% because of

- The relative risk attached to the delivery of savings;
- The elapsed time before the bulk of savings is potentially delivered

Based on these calculations, the level of investment which would breakeven in terms of savings envisaged in the first three years of the strategy would be approximately **€48 million** (spread over the first three years).

Any effort to rigorously derive the level of investment required for the second tranche (FY2006 – FY2009) is likely to be unreliable because of the back-loaded nature of the savings envisaged. At this stage, it is not unreasonable to expect that a continuation of the investment levels proposed for the first three years would be likely to provide a rate of return equal to or greater than that in the first three years. The investment should reap increasing rewards by virtue of the cumulative effect of the initiatives implemented in the earlier years.

Therefore, the overall amount, which could be invested over the whole period of the strategy, 2002 – 2009, based on projected financial benefits only, is

- €48 million in the years 2003 – 2005
- A minimum of an additional €64 million in the years 2006 – 2009

The table below sets out the envisaged savings for each year, and the net present value of the savings less the investment proposed . The total cumulative net present value of savings, after taking into account the investment proposed, is **€132.7 million**

FINANCIAL TABLEAU	FY2003 €'million	FY2004 €'million	FY2005 €'million	FY2006 €'million	FY2007 €'million	FY2008 €'million	FY2009 €'million	Cumulative €'million
Total Savings pa	**5.2**	**15.7**	**31.4**	**52.3**	**78.4**	**109.8**	**146.4**	**439.2**
Less: Investment	15.9	15.9	15.9	15.9	15.9	15.9	15.9	**111.0**
NPV discounted @ 20%: Years 1-7	-10.6	-0.1	10.8	21.1	30.2	37.8	43.7	**132.7**

Further investment after 2005 should reap increasing rewards by virtue of the cumulative effect of the initiatives implemented in earlier years. Nevertheless, we recommend that commitment to any investment beyond the initial period be taken with the following in mind:

- Requisite measurement systems are in place in order to confirm the accuracy of numbers;
- Confirmation that savings have been delivered in the first three years – i.e. evidenced;
- Firm commitment is made (and plans in place) to deliver the remaining savings;
- Confirmation that later years' savings assumptions are realistic and achievable;
- First tranche investment spending is neither overspent, nor forecast to be.

Projections have not taken account of non-financial benefits, as these cannot readily be quantified. However, it is recognised that a higher level of investment might be justified to reflect a value derived from non-financial benefits (where every effort is made to quantify such).

7.7 Funding Approach Recommended

The identified costs for implementing the strategy set out at 7.2 above are **€44** million in total (**€17.9** million in the first three years). As can be seen, these are significantly less than the investment proposed (**€111** million in total, **€48** million in the first three years). However, the costs associated with the procurement of technology solutions, which cannot at this stage be reliably estimated, are likely to form a significant proportion of overall costs, and need to be allowed for. While it is not possible without further study to be certain about the level of these unidentified costs, we are satisfied that on the balance of probability the proposed level of investment will be more than adequate to accommodate these.

Because of the level of unknown costs, the following approach is proposed to the funding of the strategy:-

- A fund of **€48** million be set aside and ring-fenced to cover the first three years of the strategy.
- From the fund, amounts to be allocated to cover the new positions recommended in this report in the first three years of the strategy
- Allocation of funds for the projects and initiatives recommended in this report be on the basis of individual business cases, which show how they will contribute to the achievement of the savings and other benefits envisaged in this report
- The size of the fund for years 4 – 7 to be determined based on a review of the progress in achieving savings to the end of year 3. The appropriateness of the discount rate (20%) used to determine the level of investment for the first three years should be reviewed in the light of the degree of commercial risk envisaged at that time for the delivery of future savings.
- The annual programme budget to be based upon the totality of approved business cases, and the cost of resourcing the new positions recommended.
- Overall programme funding be inextricably linked to the delivery of savings (both in-year and future years). That is to say, in the example of the base case, FY2003 funding be predicated on the basis of delivery of at least c.€5 million.

7.8 Treatment of Savings Achieved

The national eProcurement strategy, approved by the Government, has recommended that budget savings from exchequer funds, arising out of a coordinated and committed approach over time to improved procurement practices and eProcurement, which can yield better value for money for public services, should be available for use in augmenting and improving front-line services provided by the agencies concerned, subject to Government accounting rules and the right of Government to reduce any allocation in changing budgetary circumstances.

We would strongly recommend that this policy be adopted and implemented by the health sector, since any policy which involves 'rewarding' the achievement of savings by reducing budgets is likely to prove to be a significant impediment to the successful implementation of the strategy.

Clearly, in order for this approach to be successful, it is necessary that these savings are clearly identifiable and can be shown to genuinely improve value for money in the provision of patient care such services. The mechanisms for tracking procurement performance set out in this report should be used as the basis for ensuring this.

7.9 Benefits measurement

Given the significant benefits attainable, the questions of measurement, tracking, feedback and corrective action are now addressed:

- It is essential that a robust form of management reporting be instigated in order to provide managers and stakeholders with feedback on the financial performance of the strategy. We would flag this very strongly, on the basis that significant facilitating investment will be made on the premise that savings are delivered. Our experience of the lack of availability of timely financial feedback within the health sector leads us to caution that weakness in this area will seriously undermine the credibility of the strategy.
- Problems are likely to arise in the area of tracking delivery of benefits – in that local savings could possibly be absorbed into service improvements without a trail (e.g. virement). We recommend that where savings are generated, the responsible / delivering authority be required to demonstrate in what way they have been utilised (e.g. through specific reference within Service Plans, rather than after-the-event).
- Feedback mechanisms and specific accountability should combine to provide early warning systems - where corrective action is required. We reiterate that the investment case for this strategy is based upon delivery of tangible savings (either in the form of demonstrable improvements in service or reduction in cost), therefore specific personnel must be identified to take responsibility for corrective action, at executive level, in order to maintain the credibility of the strategy with stakeholders.

7.10 Conclusion

There are significant financial benefits to be achieved as a result of this strategy – based upon the assumptions within the business case.

On the assumption that the strategy will deliver c.€ 146 million savings per annum, less facilitating investment of c.€ 16 million per annum, the net annual benefit (c.€ 130 million per annum – in FY2002 terms) could be deployed to:

- Increase staffing spend / numbers by 2.8%
- Increase total capital spend by 26%
- Increase gross service provision by 1.6% (assuming the FY2002 ratios of staff / non-staff / capital expenditure were to remain constant).

8 The Way Forward

This section of the report outlines the programme of work required to implement the strategy recommendations including the immediate next steps required to initiate this process. It also highlights some of the key associated dependencies, risks, assumptions and implementation challenges.

8.1 Implementation Initiatives

The actions required to bring about the changes envisaged in this strategy have been set out in the relevant sections of the report. An overview of the implementation programme is set out below, and an outline implementation plan is provided at Appendix E.

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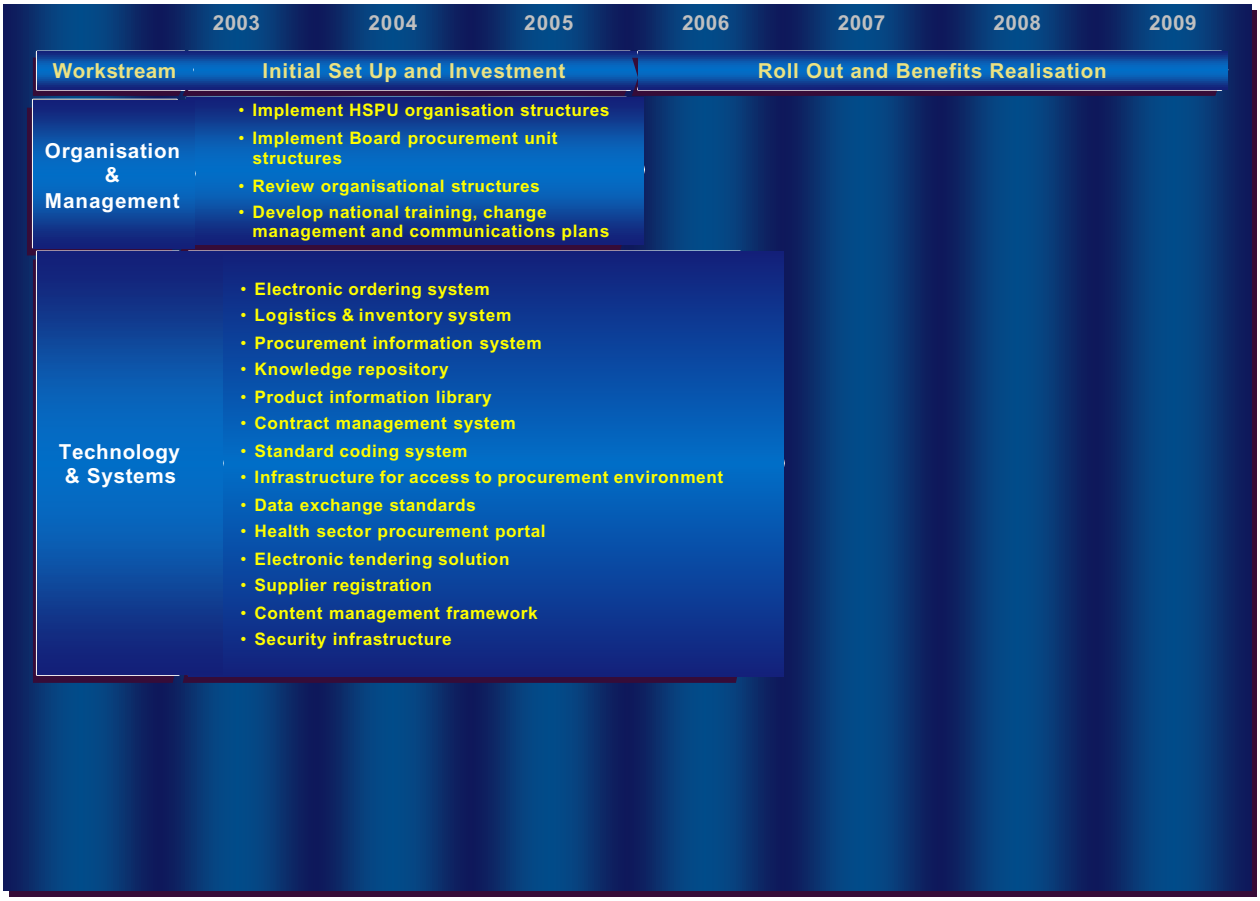

8.2 Immediate Actions Required

In order that key milestones in the implementation of the health sector procurement strategy are achieved, there are a number of essential early actions that should be initiated`.

- HeBE and the Department of Health and Children should approve the strategy and specifically the strategic targets set out.
- The National Procurement Policy Unit of the Department of Finance should agree the strategy and funding proposals.
- Agreement for the funding required for 2003 – 2005 should be obtained from the Departments of Health and Children and Finance
- An interim Health Services Procurement Unit (HSPU) should be established, and an interim Head of Health Sector Procurement (NHHSP) appointed, along with necessary support staff.
- Job specifications, roles and responsibilities for the key national and regional positions recommended should be developed by the NHHSP in consultation with the health boards, and the Voluntary Hospitals.
- Recruitment and appointment of the positions recommended for 2003 should be initiated
- Key projects scheduled for early 2003 should be commenced, if necessary with external support. In particular, the following projects should be commenced

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- Development of a standard coding and classification system
- Development of national training, change management and communications plans

8.3 Key Risks and Assumptions

The successful implementation of the recommended strategy is dependent on the following assumptions

- There are no delays in approval of the strategy;
- All of the funding proposed is made available on schedule
- Support and co-operation of the individual boards and the voluntary hospitals sector for the strategy is forthcoming;
- There are no delays in establishing the structures recommended, and in making the appointments recommended in the strategy
- The skills and expertise required to fill the positions recommended can be successfully recruited from internal or external sources.
- All the key recommendations of the strategy are implemented
- Systems and technology initiatives under way through programmes external to the procurement programme (e.g. FISP, VPN) are implemented within the timescales required for the strategy
- An integrated approach to procurement across the sector and across all categories of procurement is successfully achieved
- The Reach and BASIS initiatives related to content management and security are completed on schedule.

8.4 Key Implementation Challenges

While the potential benefits to be derived from the successful implementation of the strategy are significant, the implementation will present a number of key challenges that will need to be addressed if the targeted benefits are to be realised. These challenges (in no particular order) include;

Co-operating across traditional organisational boundaries. Many of the procurement practices and supporting technologies recommended under this strategy will require agencies to look beyond their own organisations and co-operate with colleagues in other agencies. Fostering and encouraging this co-operation whilst respecting the autonomy of individual agencies is a key challenge facing the initiative.

Viewing technology as an enabler and not a solution. While technology undoubtedly has a key role in facilitating the programme of change recommended under this strategy, experience elsewhere has shown that procurement initiatives must be based on a foundation of sound procurement practices and processes and appropriate organisational structures if they are to deliver the expected benefits. It is crucial therefore that the implementation effort addresses all elements of the procurement framework and does not place an over reliance on technology to deliver the targeted benefits.

Encouraging the participation of both the enterprise sector and buyers. The ultimate success of the initiative is dependent on the participation of both the health sector buying community and the enterprise sector. It is important that the change management and consultation process associated with

the implementation of the initiative makes adequate provision to understand and address the concerns and requirements of both the enterprise sector and health sector buyers

Realising and measuring the benefits The proposed investment programme is justified on the basis that it will facilitate the realisation of significant financial and non-financial benefits to the Irish health sector. Monitoring performance against targets is therefore critical. The challenge facing the initiative is to ensure that the measurement systems in place provide an accurate picture of progress without placing an unreasonable reporting burden on participating agencies. In the case of non-financial benefits, it is essential that their ultimate financial impact is identified through a 'cause and effect' assessment so that it can be incorporated into suitable performance metrics.

Developing the health sector's procurement competency. Designing the appropriate organisational structures and providing the necessary technology infrastructure will be of little value if the structures are not populated with staff equipped with the skills necessary to support the implementation of the practices and processes recommended by this study.

Achieving senior management support It is critical that the initiative is successful in achieving the senior management 'buy in' at sector and institution level which is necessary if the proposed procurement framework is to be adopted by a wide range of agencies.

Appendix A - Coding and Classification

The implementation of a standardised approach to coding and classification is an enabler for procurement practices such as aggregation and category management as it provides a means of obtaining the required spend profile information and the identification of potential opportunities for improving procurement performance. A consistent means of identifying items also contributes to more efficient and effective procurement processes.

In this document, reference is made to both 'coding' and 'classification'. The distinction between these two terms relates to the level of detail at which the item is identified. 'Coding' refers to the unique identification of an individual item whereas 'classification' describes the common group to which an item belongs based on its characteristics.

Requirements

A number of key requirements of a coding or classification scheme in procurement and materials management have been outlined below:-

- It should be capable of providing the required level of detailed information for analysis of spend, identification of aggregation opportunities and development of category management strategies. It should place procurement transactions into logical groups so that they are collated based on characteristics that are meaningful in terms of; what they are (specification), how they are used (user requirements) and where they come from (supply market).

- It should enable the unique identification of an item for the purposes of carrying out transactions or for detailed analysis of spend to item level. Activities such as requisitioning, ordering, receiving, storing, issuing, invoicing and matching require a consistent means of identifying the items involved to ensure that the transactions are carried out correctly and efficiently. In developing category management strategies, it may also be necessary to analyse spend and usage to item level so that the most appropriate sourcing, buying, inventory management and logistics approaches can be identified.

- Ii should be consistently applied across all organisations and activities involved. Application of item codes and classification of transactions needs to be carried out in a consistent manner to ensure analyses can be carried out for the sector as a whole and the full scope of category management opportunities can be clearly identified.

Options

A number of different options exist for the implementation of coding and classification relating to the type of code used, the scope of activities covered and the level to which it is applied. A number of the more significant options are detailed below:

Standalone Coding

Many organisations develop their own codes for use within their inventory management, procurement and financial management systems. Allocation of new codes is managed by the organisation itself. While this may be easier to implement and manage due to the scale of the organisation and its

procurement activities, it means that it is difficult to carry out any form of meaningful analysis of spend across organisations. This makes it very difficult to identify opportunities for leveraging buying power based on common requirements. One solution to this problem is to use commonly agreed categories and sub-categories to which transactions are allocated, but this requires consistency in the way allocation is implemented and also limits the level to which analysis of spend can be carried out.

Independent Coding

A number of internationally used coding schemes (see below) have been developed for use in the area of procurement, materials management and inventory management. Each of these coding schemes has its own characteristics relating to the types of items covered, the degree of independent management and the level to which coding is available. An advantage of adopting an independent coding scheme is that it provides a standard approach across all organisations in the sector, if it is applied in a consistent manner. It is worth noting that not all of the systems provide unique codes at item level so there is a requirement for individual organisations to adapt them to suit their needs.

Supplier Coding

The adoption of supplier codes for items means that organisations use supplier catalogues and item numbers as the reference for individual transactions. This has the obvious advantage that it eliminates the need to establish and manage an independent coding system with separate linkages to supplier item numbers. It also simplifies activities such as matching, as invoices usually contain the supplier code as a reference. However, using the supplier code means that it will be difficult to identify aggregation opportunities as similar items from different suppliers will have different item codes. It also means that the requisitioner selects the supplier as well as specifying the requirement which may not be the most commercially beneficial arrangement. For some categories such as drugs and medicines it may be appropriate that the supplier is specified in the item reference.

Considerations

Level of Coding

The level to which items are coded will be determined by the transaction and analysis requirements for the particular item or category. In some cases it may only be necessary to code to sub-category level (e.g.: leased cars) whereas in others, coding to item level may be necessary (e.g.: red office swivel chair). There are also instances where coding to include supplier/brand information may be required (e.g.: Anadin, Panadol). The coding system needs to be capable of coding to the required levels as required for the individual categories.

Scope of Coding System

The organisational scope of the coding system needs to be considered in determining the most appropriate approach to be used. If item coding is standardised at individual hospital/organisation level, then it may only be necessary to provide a sector-wide classification approach to facilitate spend analysis. However, if standardised sector-wide item codes are required, then the system selected need to be capable of coding to item level to facilitate analysis to this level of detail.

Significance

This refers to the level of intelligence that is built into the coding structure (i.e.: the significance of individual characters, numbers or sections of the code). A highly structured, intelligent code means that it is easier for the user to identify individual items or groups of items in a list which can have a significant impact on the efficiency of the system where there are thousands of items involved.

However this requires a structured and consistently applied process for allocating codes to items and can lead to redundancy or cramming of items into particular blocks of codes as it is not always possible to predict how many items will be allocated to a particular grouping. At the other end of the spectrum, codes can be allocated on a sequential or random basis with no significance to the item description. While this system also allows the item to be uniquely identified, it is very difficult to locate it on a list of other items so searching must be carried out on the description or some other characteristic. A distinct advantage of this approach is that the codes can be allocated automatically without any need for a pre-allocation assessment process.

Screening

Screening is the activity of checking to see if a new item already exists in the coding system. It requires a search of the item description to identify potential duplicates with a more detailed assessment of other characteristics if required. A structured approach to describing items greatly facilitates this process and helps to ensure that duplicate items do not occur (e.g.: a 500 sheet packet of 80g white photocopier paper could become: 'paper photocopy 80g white 200pk'.) Structured descriptions are also very useful where a random code allocation approach is adopted as described in the previous section, as the description becomes the main piece of information used for searching. The challenge is to ensure that the approach to developing item descriptions is consistently applied across all organisations using the coding system.

Incorporating Supplier into Code

Some coding systems incorporate the supplier reference into the item code (e.g.: EAN coding system where five of the digits identify the producer of the item). While it enables the differentiation between suppliers of identical items, it is difficult to identify aggregation opportunities as the same item supplied by two suppliers will have different codes. As in the case of adopting supplier codes, there may be instances where it is essential to incorporate the supplier or brand name in the item specification. The alternative is to use generic codes which do not identify the supplier but only describe the item itself. A significant disadvantage to incorporating supplier information in the item code is that the re-coding will be necessary every time the supplier is changed.

eProcurement

The development of eProcurement and the increased availability of on-line catalogues, markets and exchanges means that there is a significant increase in the items available for purchase. Organisations have the option of re-coding all the items in which they are interested, to comply with their own standards or alternatively they can adopt the suppliers code and use the description for searching purposes, which is a much simpler process. However, this leads to the disadvantages outlined in previous sections in relation to analysis of spend information and identification of opportunities for improving procurement performance.

Policies, Processes and Controls

The successful implementation of a standard coding system will depend on a consistent approach being adopted by all organisations across the sector. This will necessitate the development and implementation of policies, processes and controls to ensure that the integrity and effectiveness of the coding system is maintained.

Non Stock Coding

The decision in relation to the coding of non stock items will have a significant impact on the number of codes produced and the analysis of the data produced from the coding system. While the coding of

stock items is driven primarily by the requirements of the inventory management system, the same does not apply to non-stock items and the coding of these items can be more difficult to control as a result. However if non-stock items are not coded then a significant proportion of spend may not be visible in any analysis carried out.

Selection Criteria

Some of the key criteria to be considered in the selection of any coding system are outlined below:

Level of Coding

The ability of the selected system to provide codes to the required level of detail (i.e.; category, sub-category, generic item, supplier based item)

Management Information

The ability of the coding system to provide management information to the required level of detail to support the development of category management strategies.

Ease of Use

The resources, skills and training requirements to implement and manage the coding systems on an ongoing basis. The level of difficulty involved in carrying out activities associated with the procurement process such as, searching, requisitioning, ordering, matching.

Implementation

The issues involved in implementing the selected system and in particular the transition arrangements associated with moving from the current situation.

Linkages to CPV

Ability of the coding system to link to the Common Procurement Vocabulary (CPV) which is used for EU tendering purposes.

Implementation Considerations

Irrespective of which coding scheme is selected, implementation across the health sector will provide a major challenge. Because there is currently no standard coding scheme today, most organisations within the sector have developed their own, and their computer systems are based on these. Any implementation of a new coding scheme has, therefore, to take this into account.

The appropriate approach to implementation should be determined once a coding scheme has been selected. However, it is likely that all approaches will involve a phased implementation. Some factor to be taken into consideration in planning the implementation will include:-

- The need for an approach to the allocation of new and modified codes which would ensure the integrity and uniformity of the scheme and a single point of responsibility, while at the same time avoiding the introduction of obstacles to the efficiency of organisations' own independent processes
- The need to minimise duplication and potential confusion in maintaining old and new coding schemes

- The avoidance of the need for extensive modifications to existing, sometimes ageing, computer systems
- The benefits of consistency with schemes and approaches selected by other parts of the public sector, especially in connection with potential for nationally aggregated contracts.

An approach which is likely to be applicable for many organisations will involve 'mapping' their existing coding schemes to the newly selected scheme. Thus, for an interim period, their existing internal computer systems could continue to deal with existing coding schemes, while additional automated processes would ensure that, where relevant for external purposes (e.g. eOrdering, sector-level MIS), they would be able to use the new standard coding scheme. This would allow organisations to adopt a standard coding scheme gradually as they became more and more involved in sector level procurement initiatives. Failure to adopt the standard coding scheme would in fact preclude them from participating in most such initiatives over time. A timetable could be agreed for organisations to transition to any new scheme selected, and this could be linked, for example, to the rollout schedule for a sector standard ERP system.

Critical Success Factors

A number of the critical success factors associated with the effective implementation of a coding system are outlined below:

- Full commitment of all organisations in the Health Sector
- Realistic implementation plan for transition to the new coding system
- Cooperation of suppliers in the implementation of new codes and compliance with new procedures for activities such as ordering, receiving and invoic ing
- Clear working procedures for individuals involved in the procurement process
- Resources and skills to manage the implementation and ongoing operation of the coding system
- Clear responsibility and authority for the effectiveness and integrity of the coding system

Examples of International Coding and Classification Systems

System	Description
NSV	National Supplies Vocabulary. Developed for use in the NHS and specifically designed to meet the needs of the health sector. It is a centrally managed code and users apply for the issue of new codes as required.
CPV	Common Procurement Vocabulary. Used by the EU for tendering purposes.
UNSPSC	Universal Standard Product and Services Coding. Developed from the Dun and Bradstreet Standard Product and Servic es (SPSC) code and the United Nations Common Coding system (UNCCS). It is a public domain code that is managed by the Electronic Commerce Code Management Association (ECCMA)
EAN	European Article Number. Developed by the Article Number Association (ANA) it incorporates country, producer and article information in a 13 digit code. One of its main applications is in bar coding.

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Appendix B - Unit Costs

The following is a suggested approach to measuring whether the consolidation of both demand and purchasing power and the introduction of improved procurement practices have in fact led to a lowering of the average unit price paid for goods and/or services, hereafter referred to as items.

The approach to developing an index for the health sector and associated sub indices will prove valuable in the determination of the impact of procurement practices on the prices paid for items.

While the index will provide a barometer of the effectiveness of procurement initiatives, the changes in value in the index should not be examined in isolation. The pricing index per se is merely one of a set of tools which should be used to examine the success or otherwise of particular procurement initiatives.

Approach to Developing a Pricing Index

A pricing index is based on establishing the prices of a defined basket of goods in the reference period (i.e. known as the base period) and then tracking the cost of purchasing this same basket of goods at defined future time intervals.

In order to build a pricing model for the health sector the following components need to be understood

- Price
- Relative expenditure weights of each product and service
- Construction of the base period basket.

The **price paid** for goods or services as used in the index should be the average price per unit excluding all taxes, payment related discounts and delivery costs.

In order to determine which items should be included in the pricing basket the **relative expenditure weights** of each product and service purchased by the health sector during the base period need to be calculated. In order to 'quick start' this exercise it is possible that existing data sources may be used to determine those items which should be included in the basket. These items may be selected based on criteria such as size of current expenditure, importance, frequency of purchase, availability of data etc. Once this preliminary list is established the expenditure weights will need to be calculated.

A reference period of between 8-12 weeks should be established during which the expenditure of the health sector on items selected is recorded. Each unique product and service is coded to a standard classification, and the total expenditure on that item is recorded. It should be noted that some items will be differentiated by brand, this will be reflected in the standard classification system by the inclusion of a separate line item for brands of items where appropriate. Items, which may have been excluded from the basket calculation due to the timing of the base period analysis, should be included by allocating past annual expenditure on a pro rata basis to the base period. Finally the total expenditure per item relative to the total expenditure over the base period should be calculated.

During the reference period, the base unit prices per item to be included in the basket will be collected. As there will be multiple price observations collected during the base period by multiple organisations, the relevant price for the price index will be the average of the collected unit prices. Finally the items of interest are grouped into a **basket**. This basket is priced for the first time during the base period. The index value for this base period will be 100. It should be noted that every organisation within the health sector should not collect price data but rather a panel of organisations.

The products within the basket could be grouped to form sub-indices, if required, which might be of relevance to the health sector.

Once the base index has been built, it is necessary to price the basket of goods at predefined intervals. Since the weights for the index have been set in the base period the only information that needs to be collected in subsequent periods is the unit price per basket item. The units for each item to be priced need to be clearly defined for each product and service. The pricing should take place quarterly with all products being priced in the same 10 days within the quarter. The average of the prices recorded for each item is then used to calculate the index for that period. The panel of organisations contributing price data each quarter should be the same as those, which provided the initial price observations during the base period. Where an organisation can no longer take part in the collection process, an alternate can be substituted where it exhibits similar characteristics to the departing organisation e.g. size, spend, geography, activity etc.

Adjustments

In the instance of the procurement price index any changes in the index may be attributed to changes in procurement policy and therefore if possible external influencers need to be excluded so that erroneous conclusions are not drawn from the index.

Currency Movements

Adjustments should be made to exclude the impact of currency movements. Either avoid this issue and use a fixed exchange rate for the product such that only real price changes are recorded or avoid including items priced in any currency other than the Euro from the basket. The former would mean that the index 'cost' of the basket is merely a relative cost and not an absolute cost.

Market Conditions

To say that there has been a 5% overall increase in the price index is in itself inconclusive, however if it is compared with the overall market trends then this 5% increase may be significantly less than the increase experienced by the market at large. Depending on where the market level is, the conclusions to be drawn regarding a movement in the price index may be positive or negative. There is an expectations that the procurement practices should mean that index shows you to be outperforming the market.

One possible approach is to attempt to eliminate the underlying market contribution to the index by applying a deflator to it so as to adjust for the inflation within the market. The CPI is one possible deflator but this is more suited to an index comprised of consumer items. It is worth trying to locate a credible deflator for this type of inflation. Alternatively leave the index unadjusted but draw on other sources of information regarding prevailing market conditions and consider these when drawing conclusions about the index level.

Limitations of the index

Quality

A price index is unable to account for changes in the underlying quality of the service and product procured. In order to fully understand if price falls or stabilisation is related to falls in quality a number of other measures should be looked at

- Average value of wastage between periods
- Customer Satisfaction with supplied products/services
- Average supplier lead-time
- Average errors per invoice
- Etc.

Other measures, such as counting the number of suppliers within a category and comparing it to those there the previous year could be an indicator of the level of competition in the market place. Therefore it is important to select a number of key performance indicators of which the price index is just one, albeit very important in order to understand the impact of changes to procurement procedures and processes.

Changes in expenditure patterns - The approach to the index construction is based on the relative weights of the basket holding constant over time. The weights will only be adjusted during re-basing of the index. It is recommended that the index be re-based every 4-5 years.

Volume influences on Price – Once aggregation of demand becomes more widespread in the health sector, it is expected that it may benefit from volume discounts, which will impact on the unit cost of the product or service procured. Some of these volume discounts may be due to efficiencies in procurement practice such as the bundling of orders but others may be due to an increase in the health sector's own demand for goods which has lead to a volume discount while headline expenditure increases. It is important therefore to record the volumes ordered of any good in addition to the unit price. This will allow you to determine if the unit cost falls are volume related. It is always worth exploring what has lead to the volume increase – be it patient numbers, bundling of demand etc. It is also worth looking at any increases in storage or wastage costs as a result of these volume discounts.

Example of Price Index Calculations

Assume the sector has an annual expenditure in a particular area of €1m. This is spent on three products known as a, b and c with €350,000, €150,000 and €500,000 being spent on each respectively.

The pricing basket would contain the three products.

The relative expenditure weights for the products a, b and c are 35%, 15% and 50% respectively. The base price of **a is €10, b is €15** and **c is €1.5,** the calculation of the base index is illustrated hereunder.

	Product	Weight (Wo)	Base Price (Po)	Po*Wo	Base Index (Io)
	a	35	10	3.5	53.84615385
	b	15	15	2.25	34.61538462
	c	50	1.5	0.75	11.53846154
Total		100		6.5	100

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The base index value calculation for product a is calculated as the price relative of product a divided by the sum of the price relatives for the entire basket.

If during the next quarter the sector implements changes in its procurement procedures that will impact on products a and b only then the Period 1 is calculated as follows.

	Product	Weight (Wo)	New Price (P1)	P1*W0	Index 1
	a	35	11	3.85	59.23076923
	b	15	12	1.8	27.69230769
	c	50	1.5	0.75	11.53846154
Total		100		6.4	98.46153846

Using the new prices with the base weights the overall index is now 98.46, indicating a lowering of the overall price level by approx. 2.54%.

While this gives the sector the overall movement of the basket of goods they may also wish to examine sub indices. In this case imagine they calculate a sub index for the basket where procurement changes have been implemented and another sub index for those goods where no procurement changes have not been implemented.

In this first index products a and b are included. a accounts for €350,000 (70%) while b accounts for €150,000(30%) of overall expenditure.

Sub Index for those products where procurement changes have taken place

Products	New Weights	New Price (P1)	P1*W0	Index 1
a	70	11	7.7	66.95652174
b	30	12	3.6	31.30434783
			11.3	98.26086957

The sub-index has fallen to 98.26, a fall slightly greater than that of the overall index.

In the second sub index there is only product c, which accounts for 100% of the expenditure. As the price of c is unchanged from the base period the value of this sub-index is 100.

Finally it is worth noting that sub indices can be combined to yield the main index value.

	A	B	C
	% of Index	Sub Indices	Index
Sub Index A	88.46%	98.26086957	86.92307692
Sub Index B	11.54%	100	11.53846154
Index			**98.46153846**

By multiplying columns A by B and summing the value, the primary index is the result.

Appendix C - Transaction Costs

Background

The baseline business case incorporates a total saving of c.€ 43 million per annum generated from improvements in the transaction process (being over 29% of total savings). This significant figure is based upon reductions in transaction numbers and reduced cost in the end-to-end process. Achievement of such targets requires careful monitoring and review in order to ensure the delivery of:

- Reduced transaction unit cost – evidenced as cost (€) per transaction completed
- Reduced transaction numbers – evidenced as fewer transactions for the same level of procurement and/ or increased average value per transaction.

A suggested methodology for carrying out this costing process is detailed below. It is proposed that this approach and be used across the entire health sector to identify / verify baseline data and for future comparative purposes.

Objective

The objective is to use a consistent approach across the health sector in order to establish baseline costs for specific transactions, so that future procurement performance improvements across the Health Sector can be assessed. The aim is to produce an estimated cost for the purchasing process from raising an order to supplier payment, for selected items within categories.

The underlying assumption is that a transaction starts with a requisition and ends with a supplier payment. This is a broader term than order fulfilment, where a requisition could be satisfied through a depletion of existing inventory – in this instance, a supplier transaction will only occur as a result of aggregate requisitions triggering a stock replenishment order.

The approach can be used across the all categories of spend, even though the process within each category differs may differ (thereby identifying anomalies).

Working Principles

Accuracy

Due to the subjective nature of this costing process it is impossible to ensure the results are 100% accurate. The objective of this process is to provide a tool to the Health Sector to measure performance year on year, thereby demonstrating improvement or not, with reasonable accuracy.

Aggregation

Collection of individual costs and volumes must enable aggregates to be produced – e.g. to allow verification of the baseline estimates which were produced as part of the national eProcurement strategy - transaction unit cost €55.50; average value of transaction € 1,400.

Comparability

Results emanating from different Health Boards / Hospitals must be capable of intra Board and inter Board comparison i.e. they must be prepared on a consistent basis. This is necessary in order to allow time-based comparisons and benchmarking. We believe the latter to be an extremely important derived benefit, enabling both learning (from those performing best) and critique (e.g. incremental improvements from poor performers, however worthy, must be set against potential performance – evidenced, perhaps, by those in the upper quartile. Our own experience in benchmarking suggests that the lowest 10% of performances can be up to eight times worse than the median (where median performance can be up to three times worse than the upper quartile). Improving the outcomes for under-performers has the most immediate impact upon averages.

Exogenous factors

To enable year on year comparisons, external factors, unique to that year, must be identified and allowed for within calculations (e.g. potentially treated as outliers within the year).

Inclusivity

Resultant sample data must be capable of representing the whole health sector population. One method of ensuring such quality could be to sample a larger population, and base reporting upon a weighted random selection of such (the same method used by Neilsen for television advertising assessment).

Repeatability

Any costing exercise must be capable of repetition, on the same basis, to allow valid comparisons between periods. Hence, the workings behind a calculation need to be evidenced, enabling cursory audit.

Transparency & Separability

Although absolute figures are important (they are the basis of the business case), transparency of elements within the process are also important in aiding on-going understanding of performance. It will not be enough to know the cost per transaction without knowing the costs of constituent elements e.g. the impact of technology upon bill paying. Degree of accuracy
Due to the subjective nature of this costing process it is impossible to ensure the results are 100% accurate. The objective of this process is to provide a tool to the Health Sector to measure performance year on year, thereby demonstrating improvement or not, with reasonable accuracy.

Accounting for external factors

In order to ensure that the baseline can be used for comparisons year on year, it is necessary to ensure that external factors, unique to that year, are identified and allowed for within the calculations.

Costs

The transaction cost should comprise:

- Salary costs for professional staff (e.g. medical, nursing, paramedical);
- Salary costs for process staff (e.g. procurement, payment processing);
- Overheads, based on a standard mark-up of salary costs to include pensions, buildings, systems etc.

This will produce a total traceable cost for procurement. Although an overhead cost is likely to vary, in reality, between locations – and potentially be independent of the procurement process (such that shifts in transaction costs have no impact upon it), a standard overhead mark-up would, in out view, be a satisfactory indicator to use until such time as there are more sophisticated financial systems available which could allocate specific overhead costs to individuals based on their locations, roles etc.

Transaction Costs Approach and Methodology

A set of representative procurement transactions should be selected from the categories below:

- Drugs and medicines
- Medical and surgical supplies
- X-ray and imaging
- Laboratory and pathology
- Catering
- Domestic and housekeeping
- Maintenance
- Office and administration
- Information and communications technology
- Utilities
- Professional and support services
- Works and capital projects
- Outsourced medical and clinical services

The selection and weighting applied to the above categories should take the following into account:

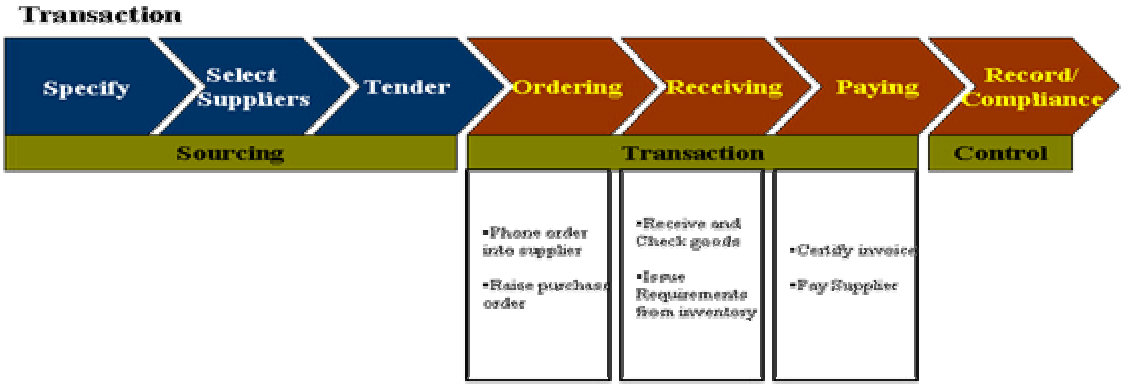
- Totality of spend (e.g. drugs and MSSE represent c.25% of non-capital works expenditure)
- Relationship with service volumes (i.e. given population-driven expansions in services, focus upon patient volume-related spend is likely to provide greater leverage in reducing costs and improving efficiency)
- Current procurement position (i.e. level of local / Board / Regional / national procedures already in place)
- Type of institution (i.e. mix of acute / non-acute hospitals, community facility representation)
- Ease of access to information (i.e. collect everything readily available, but insist that data is provided from any traditional black holes)

Each costed transaction must include the full cycle of activities from requisition to payment.

Develop the transaction process

Process maps of the internal transaction processes, from the point of requisition to invoice payment should be developed. Error rates throughout the transaction process should also be captured.

E.g.



Annual frequency of performance, together with duration of the activity should be measured. The total cost of all activities is then calculated through summation.

The unit purchased must be standardised for comparative purposes – the item and quantity ordered by the end-user. The unit need not be an exact match, but should be close enough to avoid argument about not comparing "like with like" e.g. box of n surgical gloves, as opposed to surgical gloves from a specified manufacturer.

Measure and cost the resource inputs

Each activity must incorporate the resources and time involved in performance. This measurement process must involve those who perform the tasks - so that it is accurate and verifiable. Once the time spent on each activity has been ascertained, salary rates per grade can used to determine the cost.

Of equal importance is the elapsed time between requisition and acquisition. Other things being equal, the longer the elapsed time between identification of requirement and satisfaction, the greater the cost – e.g.

- Requirement to hold non-balance sheet buffer stocks
- Obsolescence of such stocks
- Incidence of non-system procurement at disadvantageous terms
- Additional non-procurement staff time spent in transaction process

We recommend that elapsed time be recorded, and costing approaches be considered in order to account for the time factor.

Baseline calculation

Total sample transaction costs should be weighted and aggregated. A factor could be added to account for error rates (if not already included). The average thus reflects all elements of the procurement population.

Measuring against the Baseline

A weighted set of transactions should be measured and compared against the previous period. The requisite period may well be a year, depending on the systems in place. After excluding the impact of exogenous factors, the increase or decrease in average cost can be calculated, along with volumes and average transaction value.

Reporting

A formal feedback mechanism should be put in place, enabling on-going discussions with representatives from the acute sector, community care sector and hospital institutions.

Appendix D - User Satisfaction Assessment Proposed Approach

Background

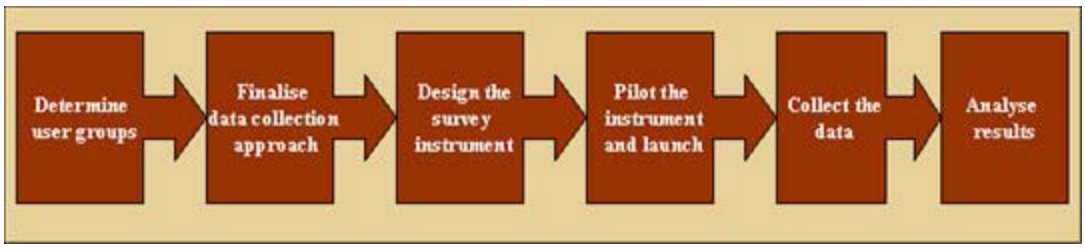
End-user satisfaction is based on perception – the end-users perceived value of the procurement practices and procedures. The end-user perception of reality may differ substantially from the purchasing and materials management department perception of reality. The purpose of an end-user satisfaction survey is two fold. First, and most importantly, an end-user satisfaction assessment provides a meaningful measurement beyond technological metrics and establishes ends-user expectations based on current delivery of service. Second, the information collected can be leveraged and shared with the service provider transforming the relationship between service provider and service recipient into a working partnership.

Objective

The objective is to establish a baseline and use the information collected to develop and formulate service level agreements between the service providers and the service recipients. The information provided in a baseline analysis clarifies end-user expectations and identifies opportunities for improved performance. Using this knowledge as a road map, both parties can develop service level agreements that include and meet end-user expectations and needs.

Approach

For results to be meaningful, the methodology must screen out items considered irrelevant, weight the selected criteria based on perceived importance, rate the overall satisfaction and then track any justifications offered. It also must provide for the identification of results by factors that could influence service delivery (e.g., geographic region, category of spend, job function). The following is a suggested approach:



Determine the user groups

Users should be representative of the acute sector, the hospital sector and other institutions. Users should also represent the following categories of spend. This is aimed to yield a user satisfaction level across the health sector.

- Drugs and medicines
- Medical and surgical supplies
- X-ray and imaging
- Laboratory and pathology
- Catering
- Domestic and housekeeping
- Maintenance
- Office and administration
- Information and communications technology
- Utilities
- Professional and support services
- Works and capital projects
- Outsourced medical and clinical services

Finalise the data collection approach

There are several methods of gathering data from the user groups including:

- Focus Groups
- Telephone Interviews
- Mail Surveys
- In Person Interviews

There are advantages and disadvantages to all methods, and the most appropriate method should be selected based on the user group. The following criteria may be used to determine the most appropriate method.

1. Time commitment available for respondents
2. Data collection period available
3. Assistance required in clarifying the questions, if any
4. Budget allocations

Design the survey instrument

The instrument may vary by target group. Whether the choice is a focus group, a series of telephone surveys, or one-to-one interviews, the following recommendations will help ensure a useful data-gathering tool:

- Ask a limited number of key stakeholders to contribute to the design process. This will ensure that users are more receptive to any data gathered, if they have input into the design of the tools.
- Questions should be simple and direct. Preferably requiring a yes/no response
- Questions should lend themselves to objective and measurable answers, avoiding subjectivity as much as possible.
- Questions should concentrate on price, quality, timeliness of service, level of errors, level of flexibility, support, effectiveness of users time in the process

Pilot the instrument

Perform a pilot test in one geographic area. The test will validate the credibility of the questionnaire including:

- Wording
- Types of questions
- Order of questions
- Layout of questionnaire

Redesign the questionnaire (if needed) based on the pre-test results

Collect the data

- Perform respondent tracking
- Monitor incoming responses to determine if response rates are within acceptable ranges and revise test approach if necessary
- Review preliminary results at regular intervals throughout data collection

Analyse results

- Determine the most effective way to represent the statistical results:
    - Graphs
    - Chart
    - Written report
- Ensure the critical areas of the test are thoroughly analysed
- Integrate relationships between findings
- Provide interpretation of analysed results
- Summarise the results in a meaningful pattern e.g. similar categories of spend, across geographical locations.

When satisfied with the quality of the pilot test and confidence in the collected data, the user satisfaction survey can be fully launched.

Comparative Exercises

To maintain success, measurement must be performed on a continual basis. It is important to track user satisfaction trends from survey to survey with an expectation that satisfaction levels will improve continually or, at the very least, remain consistent.

The first end-user satisfaction measurement should be performed approximately 6 months to 12 months after the initial baseline. This analysis provides valuable insight as to whether or not the service providers have been successful in maintaining or increasing end-user satisfaction levels. In addition to measuring satisfaction, a survey at this time provides an opportunity to determine if end-user priorities have shifted.

Reporting

A formal reporting structure and a feedback mechanism should be put in place with representatives from the acute sector, community care sector and hospital institutions.

Taking action on the findings

- Communicate the results: It is imperative that all user groups are informed about the results of the survey
- Prioritise the action steps. These may include conducting workshops to explore the survey findings in detail, gain commitment to improvement projects, understand how the survey relate to current procurement initiatives etc.
- Implement changes. The changes should directly address the issues that surfaced during the data gathering and should be incorporated into the next user satisfaction survey to ensure consistent monitoring.

Appendix E – Outline Implementation Plan

An overall outline implementation plan is provided in the attached MS Project file

Appendix F – Health Sector Expenditure – Basis of Estimation

			2000 Prov. O/turn €'000	2001 Budget €'000	2001 Prov. O/turn €'000	2002 Budget €'000
	Gross		5,656,038	6,851,039	7,077,260	8,188,595
Less	Salaries & Wages		3,281,270	3,995,753	4,045,564	4,579,747
	Gross Procured expenditure		2,374,768	2,855,286	3,031,696	3,608,848
Less	B.2.	Mobility for the Handicapped	1,841	2,025	2,025	2,598
	B.2.	Infectious Disease allowances	127	149	149	191
	B.2.	Blind Welfare	2,861	2,861	3,665	4,863
	B.2.	Long-Term Illness	38,601	44,542	47,750	48,864
	B.2.	Drug Payment Scheme	184,564	206,066	252,349	268,432
	B.2.	Hardship Scheme	21,014	22,664	25,871	26,986
	B.2.	Handicapped Grants	20,547	25,429	25,429	32,622
	B.2.	Maternity Grants	36	46	46	59
	B.3.	GMS - supplies	303,820	374,643	374,643	438,425
	B.3.	GMS - GP fees	146,902	159,760	167,731	186,534
	B.3.	GMS - Pharmacist fees	64,175	65,799	70,808	79,733
	D.1.	WHO subscription	960	997	975	1,332
	D.2.	International subscriptions	126	89	133	168
	G.1.	Thalidomide payments	207	188	206	239
	G.2.	Vaccination payments	23	1	0	1
	G.3.	Hepatitis Special a/c	47,615	34,283	49,520	34,286
	G.4.	Hepatitis Reparation fund	6,984	6,349	7,618	6,349
	Subtotal		840,403	945,891	1,028,918	1,131,682
	Net Procured expenditure		1,534,365	1,909,395	2,002,778	2,477,166
	Of which Capital / R&M		293,944	343,845	373,620	496,575
	Revenue - per e-Procurement		1,240,421	1,565,550	1,629,158	1,980,591
Add	B.2.	Drug Payment Scheme	184,564	206,066	252,349	268,432
	B.3.	GMS - supplies	303,820	374,643	374,643	438,425
	B.3.	GMS - GP fees	146,902	159,760	167,731	186,534
	B.3.	GMS - Pharmacist fees	64,175	65,799	70,808	79,733
Less	Associated staff		116,181	128,586	100,000	107,000
	Subtotal Revenue Procurement		1,823,701	2,243,232	2,394,689	2,846,715
Less	Error adjustment @ 5%		91,185	112,162	119,734	142,336
	Revenue Procurement		1,732,516	2,131,070	2,274,955	2,704,379
	Capital / R&M		293,944	343,845	373,620	496,575
	Total Procured Costbase		2,026,460	2,474,915	2,648,575	3,200,954
	As a %age of Gross Expenditure		36	36	37	39

Appendix G – List of Participating Organisations

Participating Organisations

The following organisations participated in the development of the strategy:

- North Eastern Health Board
- North Western Health Board
- Midlands Health Board
- Mid Western Health Board
- Western Health Board
- Southern Health Board
- South Eastern Health Board
- Eastern Regional Health Authority
- Voluntary Hospitals Group

Focus Groups

The members of the focus groups set up as part of the consultation process are detailed below:

Eastern Focus Group

- Eastern Regional Health Authority
- Voluntary Hospitals Group

Southern Focus Group

- South Eastern Health Board
- Southern Health Board
- Mid Western Health Board

North Western Focus Group

- Western Health Board
- Midlands Health Board
- North Western Health Board
- North Eastern Health Board

Appendix H – Summary of Estimated Costs Identified

Operating Costs (Staff Costs)

Health Sector Procurement Unit (HSPU)

Role	2003 (Posts)	2003 (Months)	2003 (FTE)	2004 (FTE)	2005 (FTE)	2006 (FTE)	2007 (FTE)	2008 (FTE)	2009 (FTE)
National Head of Health Sector Procurement	1	12	1	1	1	1	1	1	1
National Portfolio and Category Manager	1	12	1	1	1	1	1	1	1
National Category Managers	0	0	0	2	2	3	3	3	3
National Logistics and Inventory Manager	0	0	0	1	1	1	1	1	1
National Manager for Drugs and Medicines Procurement	1	6	0.5	1	1	1	1	1	1
Manager - Information and Technology	1	6	0.5	1	1	1	1	1	1
Manager - Training, Change Management & Communications	1	6	0.5	1	1	0	0	0	0
Centre of Excellence									
Nursing or Clinician Staff Member	1	6	0.5	1	2	2	2	2	2
Pharmacist	1	6	0.5	1	1	1	1	1	1
Legal Expert	1	6	0.5	1	1	1	1	1	1
Professional Support staff	1	6	0.5	2	3	5	5	5	5
Clerical Support Staff	1	12	1	3	5	5	5	5	5
Total FTE			**7**	**16**	**20**	**22**	**22**	**22**	**22**
Total Salary Cost			**361**	**807**	**962**	**1,048**	**1,048**	**1,048**	**1,048**
Employers Costs @ 16.5%			60	133	159	173	173	173	173
Overheads & Expenses @ 57%			240	536	639	696	696	696	696
Total Cost			**660**	**1,476**	**1,760**	**1,916**	**1,916**	**1,916**	**1,916**

Health Board Procurement Units

Role	2003 (Posts)	2003 (Months)	2003 (FTE)	2004 (FTE)	2005 (FTE)	2006 (FTE)	2007 (FTE)	2008 (FTE)	2009 (FTE)
Regional Head of Procurement	2	12	2	4	9	9	9	9	9
Logistics & Inventory Manager	2	12	2	4	9	9	9	9	9
Regional Head of Drugs & Medicines Procurement	2	12	2	4	9	9	9	9	9
Technical Experts									
Clinical Specialists	2	6	1	4	7	7	7	7	7
Clinical Pharmacists	3	6	1.5	4	7	9	9	9	9
Total FTE			**9**	**20**	**41**	**43**	**43**	**43**	**43**
Total Salary Cost			**516**	**1,160**	**2,441**	**2,526**	**2,526**	**2,526**	**2,526**
Employers Costs @ 16.5%			85	191	403	417	417	417	417
Overheads & Expenses @ 57%			343	771	1,621	1,677	1,677	1,677	1,677
Total Cost			**945**	**2,122**	**4,465**	**4,620**	**4,620**	**4,620**	**4,620**

Capital Costs (Projects)

The project costs are based on an estimate of the additional external resources required to supplement existing internal staff.

Project Group	Project Numbers	Total Cost (EUR '000)
Procurement – Contracting	1-9	605
Procurement - Logistics	10-13	484
Procurement - Maximising Transaction Efficiency	14-17	529
Procurement - Standards & Best Practice	18-27	166
Procurement - Performance Management & Benefits Tracking	28-37	575
Technology & Systems	38-47	3,736
Organisation & Management	48-51	424
Total Cost (EUR '000)		**6,519**

Appendix I –Recommended Projects

A list of the recommended projects is included in the attached Excel spreadsheet.

Appendix J – Examples of Targets Set or Achieved in Other Environments

Savings and benefits targets have been established from published information and actual data arising from a range of assignments involving the implementation of portfolio strategies, category strategies, logistics strategies, and e-procurement projects in a variety of sectors, including:-

- The health sector, including the UK
- Financial Services sector, including Lloyds TSB, Barclays, and UBS Warburg
- Utilities sector, including Yorkshire Water and Northumbrian Water
- Manufacturing/retailing sectors, including Philips BOC and Comet

The primary benchmark has been the savings target for influencable non-pay expenditure in the NHS in England, which has been set and achieved. This is currently 3% for each year. Logistics costs in England have also reduced by up to 10% depending upon category, as a result a implementing the national logistics infrastructure.

In other sectors, including the financial services sector, net savings on external expenditure in excess of 10% have been achieved as a result of implementing rigorous category strategies to aggregate demand and enhance buying leverage. Transaction costs resulting from the implementation of e-procurement processes have typically fallen from >£35 per transaction to <£10 per transaction. E-procurement has also significantly reduced non-compliance to contracted arrangements by as much as 50%. Other examples of targets published are set out in the table below*.

Organisation	Level of Savings (Percentage of procurement cost) Experienced/Projected
Procurement Improvement Programme	
Welsh National Assembly(BVW)	3
Northern Ireland Purchasing Agency	12
UK Central Government Departments	7
eOrdering	
UK OGC	5
UK GCAT	10
Danish Government	2 - 8
eTendering	
Canadian Government (MERX)	15
Reverse Auctions	
US Government – buyers.gov	7 – 10
US Navy NAVICP	10 - 20

* It should be noted that these figures have not been verified, and may not be directly comparable, as they may not have been calculated on a consistent basis. They represent savings claimed or projected in material published by the relevant organisations.

Appendix K – Methodology for Calculating Investment Proposed

In order to produce the expected savings, an investment will need to be made (e.g. human resources, technology, consultancy). In order to recommend a level of investment requisite with delivery of savings, the potential financial benefits are discounted across the seven-year timeframe – using a discount rate of 20%. A high rate is used (the same as within the e-Procurement strategy) because of:

- The relative risk attached to the delivery of savings;
- The elapsed time before the bulk of savings is potentially delivered

In view of the back-loaded nature of benefits, it is necessary to link investment with potential savings delivered. To this end, an investment over the first three years of the strategy was derived – which produces a net (after deducting investment costs) NPV of zero at the end of year three. The level of facilitating investment has been modelled as being the same in all three years (although different loadings are clearly feasible).

The calculations are set out overleaf. The financial headlines within the tableau are that:

- A back-loaded approach to producing total recurrent savings of c.€ 146 million per annum (over seven years) will produce total gross (non-discounted) benefits of c.€ 439 million;
- 61% of financial benefits will be generated via reductions in unit costs;
- A level of facilitating investment, equivalent to c.€16 million per annum over the first three years of the strategy, can be funded from emanating savings – such that the Net Present Value (NPV) at the end of year three is zero (using a discount rate of 20%). In other words, the Internal Rate of Return (post investment) is 20%.

FINANCIAL TABLEAU	FY2003 €'million	FY2004 €'million	FY2005 €'million	FY2006 €'million	FY2007 €'million	FY2008 €'million	FY2009 €'million	Cumulative €'million
Procured Supplies & Services	2,704	2,704	2,704	2,704	2,704	2,704	2,704	
Repairs & Maintenance	248	248	248	248	248	248	248	
Works	248	248	248	248	248	248	248	
TOTAL	**3,200**	**3,200**	**3,200**	**3,200**	**3,200**	**3,200**	**3,200**	
Cumulative impacted %age of costbase	4	11	21	36	54	75	100	
Impacted costbase	114	343	686	1,143	1,714	2,400	3,200	
Procured Supplies & Services								
Unit cost related benefit	2.9	8.7	17.4	29.0	43.5	60.8	81.1	243.4
Transaction cost related benefit	1.0	2.9	5.7	9.6	14.4	20.1	26.8	80.4
Logistics benefit	0.5	1.4	2.9	4.8	7.2	10.1	13.5	40.6
Transaction numbers benefit	0.4	1.3	2.6	4.3	6.5	9.0	12.1	36.2
Repairs & Maintenance								
Unit cost related benefit	0.3	0.8	1.6	2.7	4.0	5.6	7.4	22.3
Transaction cost related benefit	0.1	0.3	0.5	0.9	1.3	1.8	2.5	7.4
Transaction numbers benefit	0.0	0.1	0.2	0.4	0.6	0.8	1.1	3.3
Works								
Unit cost related benefit	0.0	0.1	0.3	0.4	0.7	0.9	1.2	3.7
Transaction cost related benefit	0.0	0.1	0.1	0.2	0.3	0.5	0.6	1.9
Total								
Unit cost related benefit	**3.2**	**9.6**	**19.2**	**32.1**	**48.1**	**67.4**	**89.8**	**269.5**
Transaction cost related benefit	**1.1**	**3.2**	**6.4**	**10.7**	**16.0**	**22.4**	**29.9**	**89.7**
Logistics benefit	**0.5**	**1.4**	**2.9**	**4.8**	**7.2**	**10.1**	**13.5**	**40.6**
Transaction numbers benefit	**0.5**	**1.4**	**2.8**	**4.7**	**7.1**	**9.9**	**13.2**	**39.5**
Total Savings	**5.2**	**15.7**	**31.4**	**52.3**	**78.4**	**109.8**	**146.4**	**439.2**
Less: Investment	**15.9**	**15.9**	**15.9**					**47.6**
NPV discounted @ 20%: Years 1-3	-10.6	-0.1	10.8					0.0
NPV discounted @ 20%: Years 1-7	-10.6	-0.1	10.8	30.3	37.8	44.1	49.0	**161.2**

Appendix L – Glossary

Term	Explanation
Aggregation	The consolidation of requirements for a given category for one or more agency, and using the aggregated volumes to obtain better contractual prices, terms and conditions than might be obtained in the absence of aggregation
Category	Category is used to refer to a grouping of related expenditure line items For example Stationery, Office Equipment and Transport are viewed as categories and Paper, Photocopiers and Petrol would be viewed as line items
Category Management	The development and management of procurement strategies on a category basis which detail the approach to be taken to the various stages of the procurement process.
Contract	Defined to include formal contract signed between the agency and the supplier where no formal contract exists, (e.g. for once off purchase) but purchase order exists
eProcurement	The electronic linking of public sector purchasers with their suppliers to conduct any of all aspects of procurement
Groups	Combinations of categories and sub-categories, which may have the same characteristics in terms of procurement management and organisation
Inventory	Items held in a stocking location, usually a warehouse
Negotiated Tendering Procedure	The EU Directives recognise three tendering procedures of which Negotiated Procedure is one. Under the Negotiated Tendering Procedure contracting authorities consult parties of their choice and negotiate the terms of the contract with one or more of them. This procedure may, however be used only in the very limited special circumstances set out in the Directives.
Non Payroll Spend	Payments made to suppliers for works, supplies and services
NSV	*National Supplies Vocabulary* is a hierarchical coding system developed by the NHS in the UK in the mid 1980s and expanded across the public sector. It was privatised in October 2000 and is now operated by a company called Coding International who manage the administration of the system and the allocation of new codes.
OJEC	Official Journal of the European Communities
Open Tendering Procedure	The EU Directives recognise three tendering procedures of which Open Procedure is one. Under the Open Tendering Procedure all interested

E

Term	Explanation
	parties may submit tenders.
Portfolio Management	The management procurement as a portfolio of categories so that strategies take account of the interdependencies and relationships between categories.
Procurement	The specification, sourcing, ordering, delivery, receipt, storage, payment and management of purchases of goods and services.
Purchase Cards	Similar to credit cards, however users have pre defined budgets set and can only purchase from pre defined suppliers. Generally used for low value purchases
Purchase Order	The purchasers document used to formalise a purchase transaction with a supplier
Requisition	An internal document conveying authority to an authorised individual or department to purchase specified materials in specified quantities within a specified time
Restricted Tendering Procedure	The EU Directives recognise three tendering procedures of which Restricted Procedure is one. Under the Restricted Tendering Procedure only those parties invited by the contracting authority may submit tenders
Transaction Cost	This the cost of processing an order from requisition to supplier payment.