

# Strategy for the Implementation of eProcurement in the Irish Public Sector

Final Report

WP-PM-3

19<sup>th</sup> October 2001



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**CONFIDENTIAL**

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PRICEWATERHOUSECOOPERS 



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Purchasing and Supply Consultants

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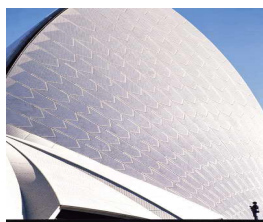
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# 1 Introduction

## 1.1 Background

In December 1999, the European Commission launched the Electronic Europe (eEurope) initiative. Its impact on Information and Communications Technology (ICT) policy has been significant, not only at European level but also in member states both nationally and regionally through the strengthening of existing initiatives and the fostering and development of new ones. One of the key areas in the eEurope Action Plan is the creation of a favourable environment for the development of e-commerce.

As a member state of the European Community, Ireland is delivering on its commitment to the eEurope agenda through a number of national initiatives, including those related to e-commerce. In relation to this, the Program for Prosperity and Fairness (PPF) highlights the opportunity for improved national competitiveness that eCommerce presents. Such competitiveness can be achieved by accelerating the transition of the Irish economy to an information society through the adoption of appropriate uniform business strategies and the use of the latest Information and Communication Technologies (ICT).

The Government's Action Plan on Implementing the Information Society in Ireland is the key instrument for achieving this transition. Arising out of this plan, the Department of Finance, in conjunction with the Department of the Taoiseach, identified eProcurement as an essential element in eCommerce, having a role in both:

- Accelerating the transition of the Irish economy to an information society;
- Contributing to the attainment of the Government objective of modernising the public service through the development of new, innovative and more efficient procurement processes.

A decision was taken to undertake an eProcurement initiative that would explore, develop, and deliver, through pilot project(s), an appropriate eProcurement solution, which could eventually be rolled out to embrace the whole of the public sector. To start the process, the Department of Finance established a public sector, cross agency, eProcurement Consultative Committee with the capacity to accommodate private sector participation.

The initiative is divided into two phases:

- The first is the production of this strategic report, which contains recommendations on the introduction of a suitable solution that best suits public service business practice;
- The second is the implementation of those recommendations, which will initially be tested on a pilot basis before being extended to the wider public service.



A consortium of PricewaterhouseCoopers, and Philip Lee Solicitors together with subcontractor Purchasing Solutions were commissioned to undertake this strategic exercise and this document is the final work product in the first phase of the initiative.

## 1.2 Approach

The study was divided into five work streams:

- Procurement Environment and Processes;
- Organisation and Change;
- Technology;
- Economic;
- Legal.

Task forces comprising consultants and stakeholder representatives (both public and private sector) were established for each of the work streams. Membership of the task forces is detailed in Appendix M. The task forces were supported by a full-time project team.

A number of representative agencies were selected to participate in the strategy study (see Appendix L). These agencies were chosen to reflect, as far as possible, all of the sectors, the widest geographical spread, and all of the different procurement types and categories of procurement practices within the public sector.

The agencies also completed questionnaires which gave details of the size and pattern of spend and details of their procurement practices and systems. Workshops were also held with a wider representation of people from the stakeholder organisations, and a short questionnaire-based survey covering a number of small, medium and large enterprises currently supplying the public sector with supplies, services or works was conducted.

Whilst the initial scope of the initiative excludes the commercial state bodies, the recommendations in this report can accommodate their inclusion at a later date.

## 1.3 Structure of Report

The structure of this report, which represents the work in the first phase of this initiative, is as follows:

*Chapter 2* presents an overview of the main features of the eProcurement strategy. It outlines the objectives and targets of the recommended strategy and details both the financial benefits and costs associated with their attainment. It explores such issues as funding for the project and treatment of savings achievable. It also sets out a vision and the key recommendations for change necessary to ensure the successful implementation of the strategy.

*Chapter 3* reviews the current public procurement regime with regard to procurement practices and processes, organisation, technology, and the economic and legal environments which impact on the introduction of eProcurement in the public sector.



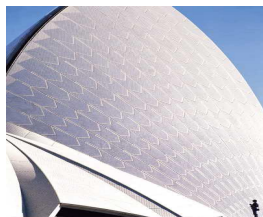
*Chapter 4* sets out the strategic objectives, agreed upon during a consultation process with key stakeholders in each sector and which will guide the development of the initiative.

*Chapter 5* sets out key recommendations to ensure the delivery of the benefits achievable through eProcurement. These include new procurement practices and processes, the necessary organisational changes and technology initiatives, as well as legal and economic measures.

*Chapter 6* deals with the costs and benefits arising out of the implementation of new automated procurement practices and includes details of funding strategies for the project. It also sets out the way the savings achieved should be used.

*Chapter 7* outlines the programme of work required to implement the new strategy and each of the recommended pilot initiatives (electronic tender management and electronic ordering). It also provides an overall timescale and schedule for the implementation of the recommendations.

In addition, there are sixteen appendices.



## 2 Overview of the eProcurement Strategy

### 2.1 Introduction

This chapter sets out an overview of the recommended strategy for eProcurement in the public sector, which is presented, in greater detail in the remainder of the report.

The scale of the opportunity to effect savings presented by eProcurement is large, by any standard. The total non-payroll spend for the public sector (excluding commercial state bodies), based primarily on the Estimates and Votes for 2001<sup>1</sup>, is approximately **EUR8.8bn**. It is projected that, if the measures recommended in this report are implemented in full, the potential financial benefits to the exchequer by 2007 are in the order of **EUR 414** million, with annual recurring benefits thereafter of **EUR 177** million. This represents a saving of approximately 2% of expenditure.

Governments throughout the EU and elsewhere have identified eProcurement as a key strategic tool in increasing the competitiveness of their national economies by reducing procurement costs. As part of their eGovernment strategies<sup>2</sup>, many EU countries have placed a major focus on eProcurement, and a number of initiatives are already well under way (see Appendix F).

However, both in the public and private sectors it is recognised that the introduction of information and communication technologies for procurement will not, on their own deliver savings. International experience has clearly shown that the fundamental benefits of eProcurement are tied directly to changes in strategic sourcing, business processes, user behaviours and relationships with suppliers. Therefore, many of the recommendations in this strategy relate not just to eProcurement, but to the wider public sector procurement environment.

### 2.2 Objectives

Following consultation with the public sector stakeholders, the following strategic objectives were agreed. These are dealt with individually in Chapter 4.

- a) To improve service levels to buyers, suppliers and users involved in public sector procurement.
- b) To develop a more integrated approach to procurement across public sector agencies and sectors.
- c) To minimise the transaction costs associated with procurement through standardisation, streamlining and automation of the procurement processes within, and where appropriate across agencies and sectors.

- d) To maximise value for money for Irish public sector expenditure by enhancing the buying power of the public sector.
- e) To promote competition among suppliers while maintaining reliable sources of supply.
- f) To optimise inventory levels through the adoption of efficient procurement practices.
- g) To make effective use of human resources in the procurement process.
- h) To promote the use of eCommerce in the wider economy.
- i) To improve the auditability of public procurement expenditures.
- j) To be progressive in the adoption of procurement related Information and Communication Technologies (ICT).

Key performance indicators and targets are proposed for each of the foregoing objectives.

## 2.3 Targets Proposed

There are both financial and non-financial targets proposed, and they are detailed in Appendix B. The targets relate to levels to be achieved by the end of 2007, with interim measures along the way. The targets are set with reference to the budgeted / forecasted out-turn for FY2001 (at constant prices).

Some of the key targets to be achieved by the end of 2007 include:

- **Unit cost reductions of 2.5% of total expenditure on supplies and services and works (repairs and maintenance)**, arising from reductions in off-contract procurement and aggregation of procurement across agencies;
- **Average transaction costs reductions of 5% for supplies services and works (repair and maintenance)** as a result of standardisation, streamlining and automation;
- **Unit cost reductions of 0.5% of total expenditure on capital works** arising from savings in professional fees resulting from efficiency gains in the tender process and contract administration;
- **Transaction cost related reductions of 0.25% in overall expenditure on capital works** as a result of public sector administrative cost savings;
- 90% of tender competitions (above EU thresholds) carried out electronically;
- 80% of payments carried out electronically;
- 10% of all expenditure on supplies and services supported by electronic catalogue and ordering facilities.

Significant financial benefits to the Exchequer, as well as other non-financial benefits will be obtained if these targets are met.

## 2.4 Financial Benefits

In addition to the non-financial benefits outlined in section 2.2 above, the economic justification for eProcurement is based primarily on the following three factors:

1. **Reducing off-contract spending** by using technology to increase user awareness of existing contract facilities and by making it easier to order against them.
2. **Leveraging buying power** by using technology to support the identification of opportunities for aggregation and by facilitating the aggregation of user requirements within and across organisations.
3. **Reducing transaction costs** by using technology to automate processes which are currently paper based, and to streamline and standardise processes and documentation.

The financial benefits which can be achieved through the implementation of the strategy recommendations are significant. Approximately **EUR 8.8bn** will be spent on the procurement of works supplies and services by the public sector (excluding the commercial state sector) in 2001. If the financial targets outlined above are achieved, then the estimated financial benefits (at 2001 values) will be as follows:

Target	Cumulative Financial Benefits to 2007	Potential Annual Financial Benefits Thereafter
<ul style="list-style-type: none"> <li>• Unit cost reductions of 2.5% for supplies, services and works (repairs and maintenance)</li> </ul>	EUR 330m	EUR 141m
<ul style="list-style-type: none"> <li>• Reduction of 5% in average transaction costs for supplies, services and works (repair and maintenance)</li> </ul>	EUR 28m	EUR 12m
<ul style="list-style-type: none"> <li>• Reduction of 0.75% in overall expenditure on capital works</li> </ul>	EUR 56m	EUR 24m
<b>Total</b>	<b>EUR 414m</b>	<b>EUR 177m</b>

Table 1: Potential Savings

These benefits will not be delivered evenly over the period of the strategy. Because of the time required to put all of the recommended initiatives in place and the rate at which agencies adapt to the new model, it is likely that the benefits will be back-loaded, with approximately 70% being achieved in the final two years (2006 – 2007), as follows:

Year	Financial Benefits
2002	EUR 0m
2003	EUR 13m
2004	EUR 36m
2005	EUR 70m
2006	EUR 118m
2007	EUR 177m
<b>Total</b>	<b>EUR 414m</b>

Table 2: Timing of Savings

The scale of potential benefits will vary from organisation to organisation, reflecting different procurement patterns. There are widely varying views as to the extent of the savings achievable. However, it is generally accepted that significant savings can be achieved if the right policies are implemented. The assumptions on savings used in this report, representing 2% of annual procurement expenditure, are modest in comparison with those experienced and projected by other private and public sector organisations, as illustrated in the published examples set out 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

Table 3: Savings Achieved in Other Countries

Realising the benefits of eProcurement is a major challenge. Many organisations nationally and internationally have found that implementing eProcurement is more complex, expensive, and time-consuming than originally expected. Problems encountered include supplier resistance, security concerns, system integration costs, and the non-readiness of organisations (both buyers and suppliers) to adopt the fundamental changes required.

For the public sector, the practices adopted, the implementation timetable and the associated targets set for eProcurement initiatives need to reflect the broader agenda in areas such as value for money, fairness, promotion of competition, development of the enterprise sector and socio-economic responsibilities.

\* 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.

## 2.5 Implementation Costs

A schedule of the initiatives required to implement the above recommendations is set out at Chapter 7 (The Way Forward). A summary of the projected capital and operating costs of the initiatives over the period 2001 - 2007 is as follows:

Year	Total Estimated Cost (EUR '000s)	Total Identified Capital Costs (EUR '000s)	Total Identified Operating Costs (EUR '000s)
FY2001	38	38	0
FY2002	8,895	6,791	2,104
FY2003	11,648	6,556	5,092
FY2004	6,667		6,667
FY2005	6,752		6,752
FY2006	6,837		6,837
FY2007	6,837		6,837
Total	47,674	13,385	34,289

Table 4: Summary of Costs

These costs reflect **only** those initiatives recommended in the national strategy. It is not possible to accurately cost the full range of initiatives that may be implemented at sector and agency level over the period of the strategy. Cost estimates for these will be prepared by the sectors in developing their sector eProcurement strategies. It is likely, however, that the overall costs of implementing the national strategy will be significantly greater than the costs of the national initiatives alone.

## 2.6 Funding

It is proposed that funding for the implementation of the eProcurement strategy be provided in two tranches – the first covering the years 2002 – 2004, and the second 2005 – 2007, with a review at the end of the first period to determine the size of the second tranche. Chapter 6 describes the process used to calculate the investment proposed.

Based on the projected financial benefits only, **up to EUR 43 million** could be invested evenly over the first period to deliver the cumulative savings envisaged (EUR 49 million).

Any effort to rigorously derive the level of investment required for the second tranche (Years 2005 – 2007) 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 at minimum a continuation of the investment levels proposed for years zero to two would be justified, and it is likely that significantly greater levels of investment could be justified at that stage. 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 – 2007, based on projected financial benefits only (at constant prices), is:

- **EUR43 million** in the years 2002 – 2004;
- A minimum of an additional **EUR43 million** in the years 2005 – 2007.

This does not take account of funding for non-financial benefits because these cannot readily be quantified. However, it is recognised that a higher level of investment may be justified to reflect the value derived from non-financial benefits.

It is proposed that, at least in the initial period, the Government should provide up to 100% of the capital and operating funding required for national initiatives. It is not possible to determine the overall costs of implementing the national eProcurement strategy in advance of each sector preparing its own costed strategy. It has not been possible to verify, therefore, whether the funding proposed will be sufficient to meet all of the sectoral requirements. This should be reviewed when sectoral strategies have been completed. Should the funding proposed prove insufficient, the Government may wish to allocate additional funding to reflect the value of the non-financial benefits envisaged. In the future alternative sources of funding, such as Public Private Partnership (PPP) could be considered

## 2.7 Treatment of Savings Achieved

Savings that arise from improved procurement practices and eProcurement should be available for use in augmenting or improving front-line services within the agencies concerned, providing the savings are clearly identifiable and can be shown to genuinely improve value for money in the provision of such services.

Mechanisms for tracking procurement performance, set out in Appendix B, should be used as the basis for ensuring this. The use of savings in this way is subject to Government accounting rules and the right of Government to reduce any allocation in changing budgetary circumstances.

## 2.8 The Vision

To achieve the targets set out, a strategic vision has been developed for the implementation of eProcurement throughout the public sector over the years 2002 – 2007. The main components of the vision are:

- New organisational arrangements for procurement at national, sector and agency level.
- A new framework for the management of procurement;
- New procurement practices which are based on international best practice;
- An eProcurement systems framework to facilitate the introduction of eProcurement within and across agencies
- Legal and Economic environment



### ***New Organisational Arrangements***

New organisational structures are required at national, sectoral and agency levels in order to spearhead the drive towards eProcurement. The key recommendations for organisational change are summarised below. These are set out in greater detail in Chapter 5.

1. A new discrete, dedicated and properly resourced National Policy Unit (NPU) should be established. Its role should be to define national procurement and eProcurement policy, and facilitate, co-ordinate and oversee its implementation across the public sector.
2. A new discrete National Operations Unit (NOU)\*\* should be created. The NOU should be the body responsible for the implementation of national eProcurement strategy in alignment with national policy developed by the NPU.
3. Sector Procurement Units (SPU) should be established for each sector. Their role will be to implement sector level strategies in alignment with the overall national eProcurement strategy.
4. An SPU for central government should be established by the Department of Finance. The role of the GSA should be taken into account in this regard.
5. Sectors should facilitate the establishment of dedicated procurement functions in those agencies where they do not currently exist and where the level and/or complexity of spend would warrant it.
6. A National Procurement Advisory Board should be established in order to facilitate consultation between the NPU, the NOU and the sectors to ensure that their views are taken into consideration in the development and implementation of national procurement strategy.
7. An interim operations unit should be set up as soon as possible, tasked with managing the implementation of the early national initiatives recommended in this report. In particular, it should play a key role in establishing the NOU.
8. A National Procurement Managers' Forum should be established to provide the opportunity for Procurement Managers in the sectors to come together periodically to share views, and to provide their inputs into national initiatives and policies.
9. Sourcing teams should be established to assist in the development of category management strategies, and to carry out strategic sourcing for categories to be managed at national level. They should be chaired by a category manager appointed by the NOU, and should comprise multi-disciplinary teams drawn from the sectors.
10. The National Operations Unit, in consultation with the sectors, should develop and facilitate the implementation of a national procurement training plan.
11. A key element of implementation should be the development and implementation of a Change Management approach and plan. Change Management plans will need to reside at an initiative level, be this at the agency, sector or national level.

\*\* National Operation Unit is a working title for the purposes of this report. A unique, discrete title for this function should be agreed as part of the project to establish the function.

An overview of the new structures proposed is illustrated below:

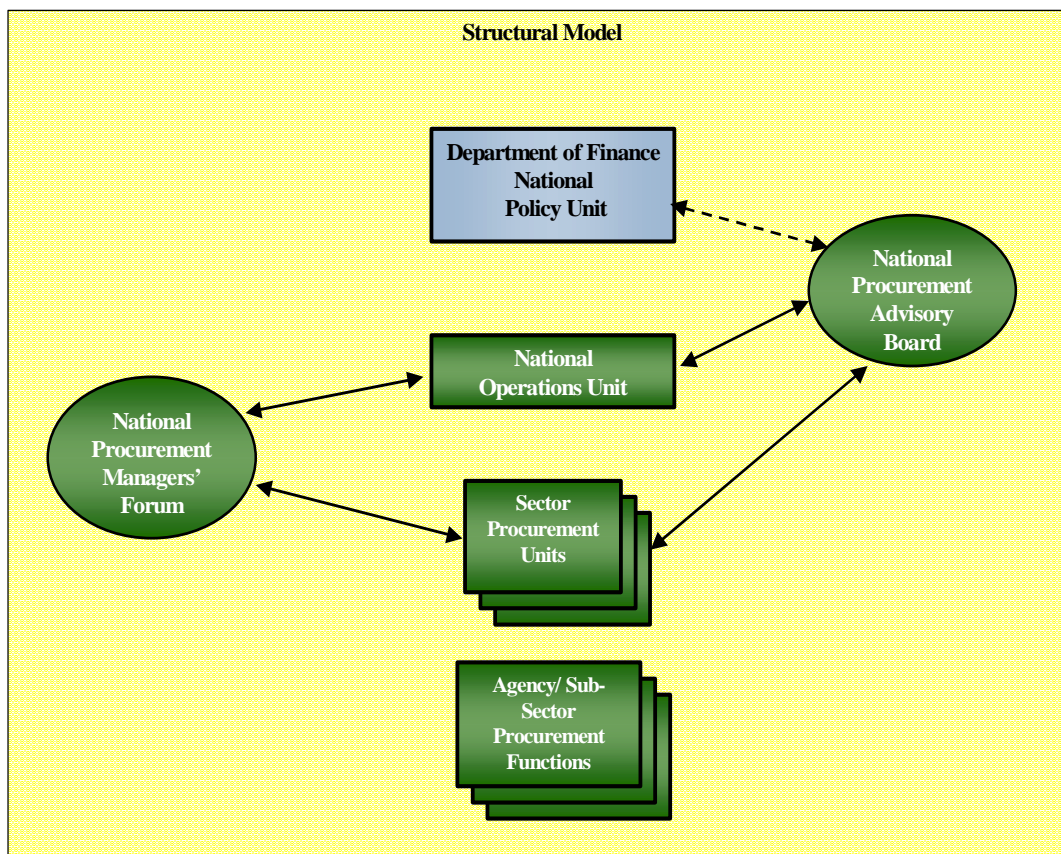


Figure 1: Overview of Proposed Organisation Structure

Two new entities are envisaged at *national level*:

- A new discrete, dedicated and properly resourced *National Policy Unit*\* within the Department of Finance, whose role would be to define national procurement and eProcurement policy in consultation with the National Operations Unit and the sectors (such as the adoption of best practice on construction contracts agreed by the Forum for the Construction Industry). It will also facilitate, co-ordinate and oversee the implementation of this policy across the public sector. It will also be responsible for approval of sector level initiatives and for supporting associated budget requests prior to their inclusion in sector budget proposals. To facilitate good planning and to provide the necessary confidence, it is recommended that a multi-annual “envelope” approach be adopted during the annual Estimates process in relation to the funding for the Procurement and eProcurement initiatives set out in this report.

\* National Policy Unit is a working title for the purposes of this report. A unique, discrete identity for this function should be agreed as part of the project to establish the function

- A **National Operations Unit (NOU)**, which would be responsible for the implementation of national eProcurement strategies and policies established by the NPU. It would be separate from the National Policy Unit, with a discrete structure, and appropriate authority. Its governance arrangements would facilitate representation of sector senior management. It would have a core of public sector management expertise, while being able to recruit required skills externally, on a permanent and/or term contract basis.

In order for the national strategy to be implemented successfully, it must be driven through the sectors, i.e. Health, Education, Local Government and Central Government. Much of the opportunity for co-operation in procurement resides within sectors, because greater commonality of procurement requirements exists and because some of the enabling factors required, such as common systems, communications channels and standards are already in place. At sector level, **Sector Procurement Units** would be set up in each sector (Health, Education, Local Government and Central Government) to drive the sectoral eProcurement programme.

At **agency level**, dedicated procurement functions are envisaged in those agencies where they do not currently exist and where the level and/or complexity of spend would warrant it.

In order to ensure an integrated approach to eProcurement nationally, two other bodies are proposed:

- A **National Procurement Advisory Board** to facilitate consultation between the NPU, the NOU and the sectors to ensure that their views are taken into consideration in the development and implementation of national procurement policy and strategy;
- A **National Procurement Managers' Forum** to provide the opportunity for procurement managers in the sectors to come together periodically to share views, and to provide their inputs into national initiatives and policies.

Because of the acute shortage of procurement skills in the public sector, a national training programme is recommended, to be co-ordinated by the NOU. In addition, NOU would be responsible for the development and co-ordination of a change management programme to manage the major changes, which will need to occur if the implementation of eProcurement is to be successful.

**Interim organisational arrangements** are proposed at a national level to enable a rapid start to the programme of change recommended in this report. These are detailed in Chapter 5.

### 2.8.1 New Procurement Management Framework

In order to achieve radical improvements in procurement performance in the public sector, a new framework for the management of procurement is required. The introduction of concepts widely used in the commercial sector is recommended. The following diagram illustrates the main components of the framework proposed.

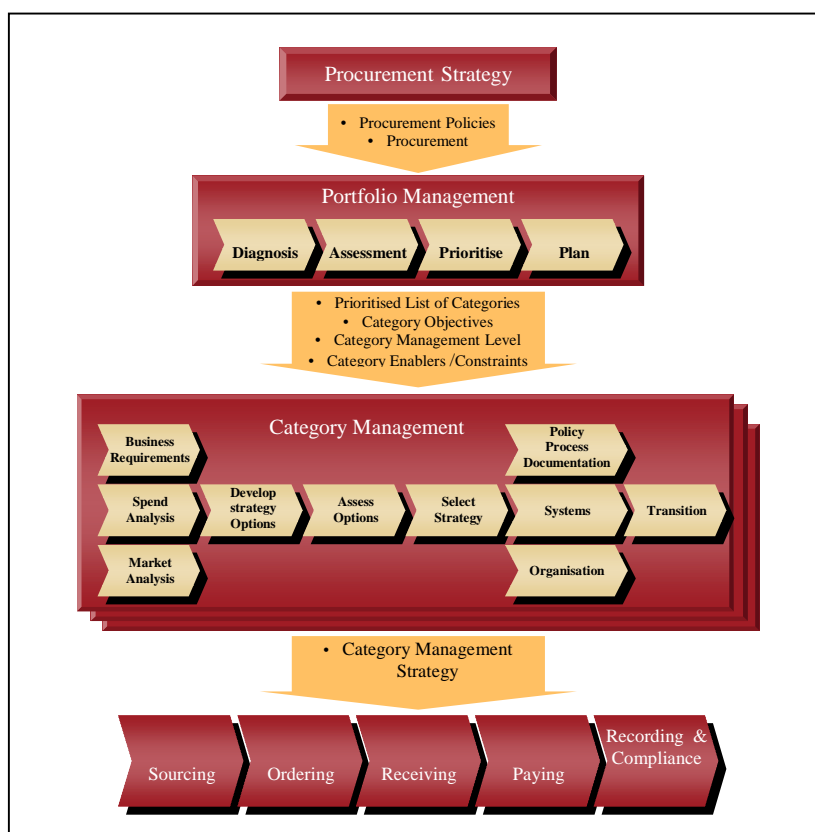


Figure 2: Proposed Procurement Management Framework

The following are the main features of the management framework proposed:

**Procurement strategy** sets out the overall procurement objectives, targets and priorities for the organisation. This forms the basis for all procurement initiatives to be undertaken and provides an underlying policy framework within which portfolio and category management are carried out.

**Portfolio management** determines the approach to be adopted for the main categories of procurement by reference to their strategic importance and their overall spend. The portfolio strategy focuses on those categories of greatest importance, and sets specific objectives to be achieved for those categories. It determines where they should be managed within the organisation structure, and allocates category managers.

**Category Management** identifies and selects the options for sourcing, contracting, order fulfilment and other aspects for each specific category of procurement. The category manager, usually supported by a multi-disciplinary sourcing team, then carries out the sourcing, specifying the needs, selecting the supplier, agreeing contracts, and specifying the

ordering, payment and fulfilment processes. Ongoing contract management and performance monitoring is also undertaken by the category manager.

In order to implement this new approach, new organisational structures and skills are required.

### **2.8.2 New Procurement Practices**

Procurement in the public sector has not kept pace with modern national and international best practice. Fundamental changes are proposed to bring this into line. Without the introduction of these changes, the eProcurement initiative will not succeed. The key recommendations for changes in procurement practices are summarised below. These are described in greater detail in Chapter 5:

1. Procurement should be aggregated at the highest appropriate level in the public sector to optimise possible economic benefit.
2. Sector Procurement Units should initiate studies on the nature and extent of non-contract procurement, and determine opportunities for increasing the proportion which can be procured under contract through improved planning, increased aggregation, and standardisation of requirements.
3. The public sector should fully exploit all contracting approaches which facilitate competition in the supply base, increase flexibility in meeting user needs and ensure fair treatment of all potential suppliers.
4. A structured and objective approach should be adapted to the management of supplier performance. Common performance metrics and targets should be established, using recognised external benchmarks where possible. Reporting and management processes should be developed to ensure that performance targets are met.
5. Procurement performance should be formally managed at agency, sector and national level. Performance objectives should be derived from overall agreed national procurement targets and should incorporate both quantitative and qualitative measures. Performance reporting should be used to drive management actions at all levels.
6. The adoption and implementation of a national standard classification scheme for the identification of procurement categories and items should be managed nationally in co-operation with the sectors.
7. The development of national procurement policy, and the publication of national procurement policies and guidelines should be undertaken nationally in consultation with the sectors.
8. A National Supplier Register should be established for recording supplier details in order to improve the availability of supplier information and to reduce the duplication involved in maintaining separate supplier lists at agency level. Responsibility for management of the register should reside at national level.
9. The development of standard procurement documentation, taking account of sector specific needs should be managed nationally in co-operation with the sectors.

### 2.8.3 eProcurement Systems Framework

A technology framework is recommended that will provide public sector buyers, suppliers and the general public with secure access to an integrated range of procurement systems and services, using Internet technology. A summary of the key recommendations in relation to procurement systems is set out below. These are described in greater detail in Chapter 5.

1. A National Procurement Website should be provided to act as a gateway to procurement related services for public sector buyers, suppliers and the general public.
2. A Content Management Framework for procurement should be devised to cater for all procurement-related information accessible via the National Procurement Website.
3. Content for procurement-related information, made available through the national web-site should be managed at a national level.
4. An electronic Tender Management facility should be provided at national level to support both above and below EU Threshold tenders for supplies, services and works contracts. Sectors/agencies may choose to implement local tender management solutions. However, where local (sector/agency) tender management solutions are deployed the national facility should provide visibility of such tender notices, documents and awards.
5. Preferred implementation models and catalogue standards should be developed at national level to facilitate the implementation of Catalogue Management systems.
6. Individual sectors should assess their sub-sector and agency requirements and where appropriate provide shared eProcurement Transaction Support and/or Catalogue Management facilities to the sub-sectors and agencies.
7. The electronic payment facilities of the Public Sector Broker being developed by Reach should be used for eProcurement systems.
8. The implementation and roll-out of MIS across the public sector should be managed at national level through the development of national standards.
9. The security infrastructure provided as part of the Public Services Broker (PSB) and any associated Trusted Third Party should be leveraged to provide the security infrastructure required for eProcurement.
10. An eProcurement Standards Working Group should be established under the National Operations Unit
11. In line with other eGovernment initiatives, XML should be promoted as the document exchange standard.
12. Catalogue standards should be based on XML schemas defined as part of the Data Exchange Standards.
13. The solutions provided should accommodate differing levels of integration and the level to be implemented should be determined on a case by case basis.
14. Where economically beneficial, the systems and support services recommended in this report should be provided on a managed service basis.
15. Packaged software solutions are recommended in preference to custom development, where appropriate.

The main components of the recommended systems framework for eProcurement are illustrated below:

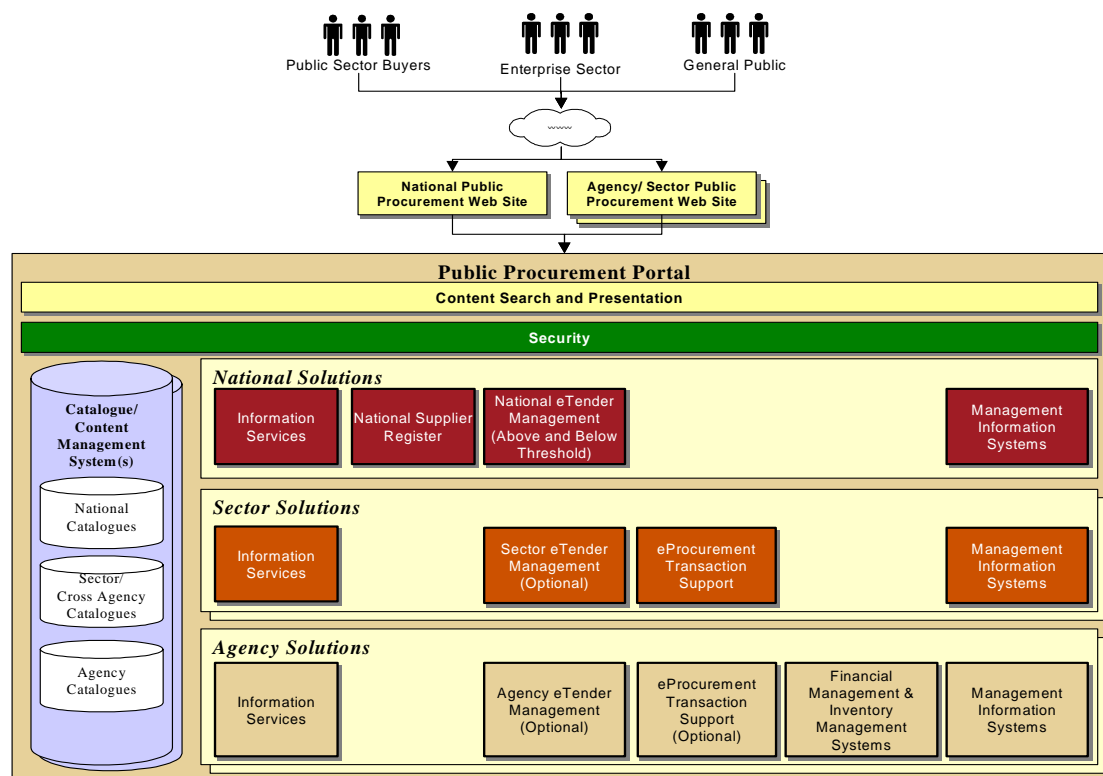


Figure 3: Technology Framework for eProcurement

A Public Procurement Portal will provide the main ‘gateway’ to all of the facilities, but they will be accessible also through various sector and agency web sites.

**National solutions** will be provided for:

- The ***national supplier register***, which will record basic details of suppliers interested in doing business with any part of the public sector;
- A ***national eTendering facility***, which will enable the online advertising of tenders, and the secure transmission of electronic tender documents between buyers and bidders for public sector contracts. The system will support the whole tendering process from tender document preparation through tender award to contract management. It will build upon the existing [www.etenders.gov.ie](http://www.etenders.gov.ie) initiative which at present publishes public sector procurement opportunities;
- ***Information Services***, giving access to public sector procurement-related information such as news, publications and policies, as well as discussion forums;
- ***Management information*** on procurement, such as spend analysis, performance data and trends.

***Catalogue-based ordering systems*** will be provided at sector and/ or agency level. They will provide public sector buyers with Internet-based facilities to search and order from online



catalogues of goods and services available under contracts agreed with suppliers. These systems will provide for various means of integration with agencies' financial systems to record the transactions carried out.

#### 2.8.4 Legal Environment

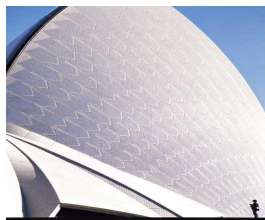
The key legal recommendations are set out below. These are detailed in Chapter 5.

1. In order to facilitate the adoption of eTendering, there is a need for early transposition of the currently proposed amendments to the EU public procurement Directives, once adopted.
2. The Irish Government should take up the invitation from the EU Commission to make a submission in relation to eProcurement and the merit of permitting the use within the public sector of the eProcurement practices that are being used in the private sector, and that it consults with the utilities sector in formulating its submission.
3. In preparation for the introduction of eProcurement, agencies should, on an individual basis, carry out an audit of the legal documents under which they were established and operate (including, where applicable, their statutory basis) to ensure that these do not contain any barriers to the transition to eProcurement and, if potential barriers are identified, they should seek to have them removed.
4. The Irish Government should consider support for any amendments proposed by other Member States or by the EU Commission in favour of permitting the use of reverse auctions or table such an amendment itself.
5. The Irish Government, through the participation of the National Accreditation Board in the European Electronic Signature Standardisation Initiative, should seek to accelerate progress on the development of standards relating to the definitions set out in the Electronic Signatures Directive, so as to ensure the effective operation of the free movement and mutual recognition principles set out in that Directive.
6. Purchasing practices should be designed having regard, at all times, to the need to maximise competition in the market and to discourage anti-competitive practices.
7. In the terms and conditions of use of any eProcurement facility which is set up, and in the tender documents relating to specific procurements, clear rules should be laid down in relation to the transmission and receipt of electronic communications, and procedures should be put in place to deal with all reasonable contingencies.

### 2.8.5 *Economic Environment*

The key recommendations related to economic factors are set out below. These are detailed in Chapter 5.

1. The National Operations Unit should keep abreast of major developments in the profile and eCommerce readiness of the existing supply base and be in a position to advise on the likely impact of eProcurement and category management strategies on the supply base.
2. The National Operations Unit should develop a mechanism for keeping suppliers informed of changes in procurement policies, practices and processes, as well as the introduction of new services such as the supplier registration system.
3. The national and sectoral procurement performance indicator system should incorporate data on the size, location and ownership of enterprises registering and tendering for public procurement business as well as for those awarded contracts. This information should also be used as a basis to track the impacts of the introduction of eProcurement on the supply base.



## 3 Review of Procurement in the Public Sector

### 3.1 Introduction

The successful implementation of an eProcurement strategy is dependent on it being based on a sound procurement foundation. Consequently, a review of the existing procurement environment was carried out.

Figure 4 below illustrates the framework within which the procurement environment was analysed. Chapter 5 deals with the changes recommended to address the issues identified.

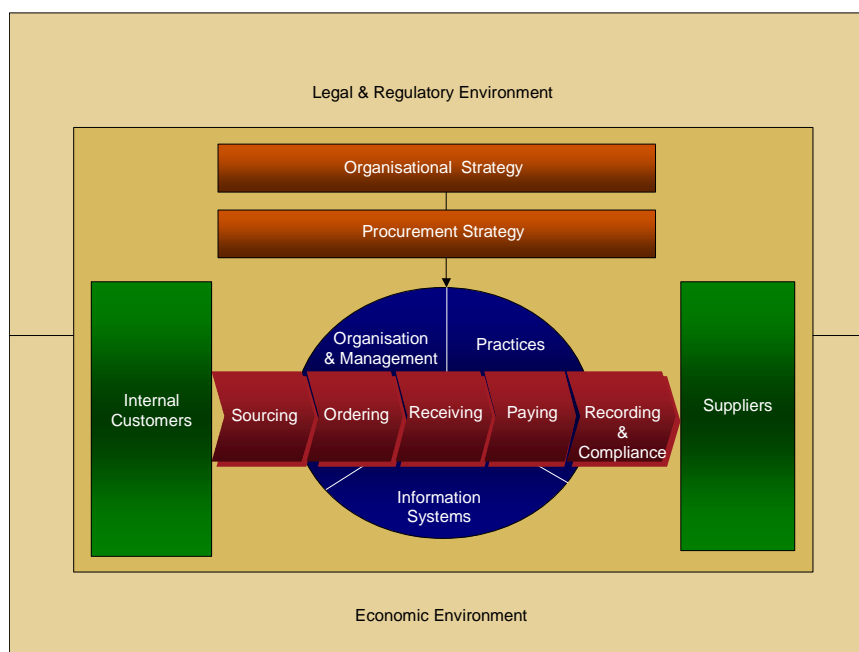


Figure 4: Procurement Framework

**Procurement strategy** sets out the overall procurement objectives, targets and priorities for the organisation, and links them to the overall strategy of that organisation. eProcurement strategy includes, in addition, further objectives in relation to the appropriate Information and Communications Technologies (ICT) necessary for successful implementation of such a strategy.

**The Procurement Process** comprises:

- Strategic sourcing which involves specifying requirements, selecting the supplier and agreeing contracts;

- The transaction process, which includes ordering, receiving, and payment;
- Recording and compliance, which includes contract management, supplier management; performance management and information management.

The procurement process must be supported by:

- Appropriate *organisation structures* resources and skills;
- Policies and procedures in relation to the *procurement practices* to be used;
- *Information systems*, including eProcurement.

Figure 4 also shows how *internal customers* (buyers and end users) and *suppliers* (including consultants and contractors) fit into the framework. These are important areas and it is necessary to have effective policies in relation to dealing with both communities.

The analysis also considered the wider *economic environment* within which public sector procurement takes place and the *legal and regulatory environment* governing public sector Procurement and eProcurement.

The analysis presented is based on a review of the following material:

- Data questionnaires completed by the participating pilot agencies and selected suppliers;
- The profile of supply completed by six of the pilot agencies and secondary data regarding the eCommerce readiness of Irish enterprise;
- Relevant procurement related legislation.

The findings of the pilot-based analysis were also reviewed by the task forces, and they supported the view that the results presented in this chapter broadly reflect the situation in the wider public sector.

The overview is presented in the following five sub-sections:

- Procurement Practices & Processes;
- Organisation and Management;
- Technology;
- Economic Environment;
- Legal and Regulatory Environment.

## 3.2 Procurement Practices & Processes

### 3.2.1 Spend Profile

The total non-payroll spend (excluding the commercial state bodies) for the public sector, based on the Estimates and Votes for 2001, and other information obtained from the sectors, is approximately **EUR 8.8bn** of which EUR 4.73bn (53%) is spent on *Supplies & Services* with the remaining EUR 4.12bn (47%) being allocated to *Works* procurement.

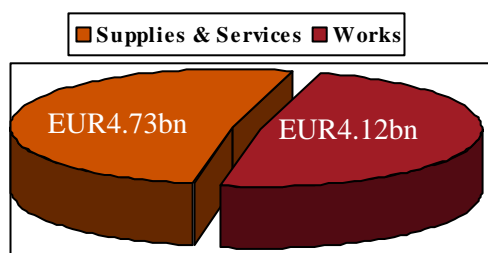


Figure 5: Total Public Sector Spend (2001)

The most recent data available in the pilot agencies was for the year 1999. In that year, *Works* accounted for about 41% of total non-payroll spend, with *Supplies* and *Services* representing 26% and 33% respectively.

The split between *Works*, *Supplies* and *Services* varies significantly across the pilot agencies, reflecting the different spend profiles that exist. Non-payroll spend as a percentage of total spend varies from about 20% to 70% across the pilot agencies, with the median being approximately 45%. Those at the higher end of the scale tend to have a large proportion of *Works* spend.

### 3.2.2 Transaction Costs

A transaction costing exercise (See Appendix N) for *Supplies* and *Services* carried out in one of the pilot agencies and data obtained from previous exercises carried out in two other agencies, indicate that the **cost of the transaction process from requisition to cheque payment is between EUR 41 and EUR 70**. This excludes costs involved in other activities in the transaction process such as specification of needs, supplier selection and contract monitoring.

Analysis of the spend data from the pilot agencies indicates that **approximately 70% of all transactions have a value of EUR 1, 270 or less, with the average transaction value for *Supplies & Services* being about EUR 1,651**. This indicates that approximately 2.7 million procurement transactions will be processed for *Supplies & Services* across the public sector in 2001. **Thus, it will cost EUR 173m to procure EUR 4.73bn of services and supplies, or 3.66 cents per euro spent.**

If this rationale were applied to works (repair and maintenance), the total transaction costs would be approximately EUR 40m.

The transaction costs for capital works (See Appendix B), including tender preparation and management, and contract supervision and administration, amount to approximately 5 cents per euro spent, giving a total transaction cost for capital works of approximately EUR152m. In summary, the total transaction costs associated with the expenditure of EUR 8.8bn are in the order of EUR 365m.

### 3.2.3 Procurement Policy

The main source of public procurement policy is the publication “Public Procurement”, commonly known as the Green Book, which was **last fully revised in 1994**. This sets out high level guidelines governing procurement of works supplies and services, but **does not address all required elements of procurement policy**. Most agencies rely entirely on this document for their procurement policies. Examples of agencies who have produced their own policies include the Health Materials Management Board (HMMB) and the Defence forces. Other agencies have developed individual policies for specific aspects of procurement (e.g. approval limits).

### 3.2.4 Procurement Strategy and Planning

Procurement planning, other than for capital works, is **generally confined to the annual budgeting process** where outline requirements for following years are assessed. Procurement functions, where they exist, are generally not involved in the planning process and in many cases their initial input is at the requisition stage.

Procurement exercises are usually initiated in response to specific needs as they arise, and approaches used are governed primarily by regulatory compliance. Outside of capital works **agencies do not strategically assess their spend by category to identify opportunities for increasing value for money and there is no proactive approach taken to analysing the overall portfolio of procurement needs**. Strategies and priorities are not developed to achieve specific objectives for the various categories of procurement.

In general, agencies plan and carry out their procurement independently, with **limited co-ordination across agencies, and none across sectors**. Existing structures are not geared to facilitating cross-agency co-operation in procurement. Even within individual agencies, there is in many cases no effective process for aggregating procurement requirements of different users, nor is there a tradition of pooling procurement expertise gained from experience. As a consequence the opportunities to reduce costs and improve levels of quality and service, are rarely achieved. In addition, there is an avoidable duplication of administration effort in relation to market research, tendering, negotiation, and supplier management activities.

Some exceptions to the above include, but are not limited to the following:

- The Healthcare Materials Management Board co-ordinates purchasing for certain categories of procurement on behalf of the sector as a whole;
- The Universities have appointed Procurement Managers, and are co-operating to improve procurement across the sub-sector;
- The Government Supplies Agency (GSA) carries out aggregated procurement in relation to certain categories of supplies on behalf of central Government Departments.

### 3.2.5 *Standardisation of Documentation*

There are few standards in existence for the structure or content of procurement documentation such as pre-qualification questionnaires, tenders or contracts across the public sector. As a result of this **lack of document standardisation**, there is significant ongoing duplication of effort through 're-invention of the wheel', little sharing of lessons learned, and unnecessary difficulties for suppliers in dealing with different public sector agencies.

Exceptions to the above are:

- Public Works, where standard forms of contract have been developed. However there is still significant scope for further standardisation of documentation in the works area.
- Health Materials Management Board standard tender framework

### 3.2.6 *Product Coding Standards*

There are **no common product coding standards in operation across the public sector**, and in general agencies have developed their own coding systems. The Common Procurement Vocabulary (CPV) is generally used when tendering in the EU Journal to cross reference the list of requirements, but it is not used as a means of categorising items once they are purchased. Its use for categorising tenders will become mandatory under the amendments to the Directives on Public Procurement<sup>2</sup>.

The National Supplies Vocabulary (NSV) has been adopted by some of the agencies in the Health Sector.

### 3.2.7 *Supplier Selection and Contracting*

Suppliers are required to register with each of the agencies that they deal with and often the **same basic information must also be provided in each pre-qualification / tender submission**.

Most agencies maintain ad-hoc approved supplier lists that are used primarily as a basis for the identification of a restricted number of suppliers to provide quotations for below EU threshold procurement. In many cases, the lists are used also to notify selected suppliers of tenders, which have been advertised publicly.

The inclusion of suppliers on these lists is based primarily on the provision of basic details and tax compliance certificates (where applicable). There is generally no evaluation carried out for suppliers to be included on these lists.

The approach to evaluating supplier tenders varies across agencies for similar types of procurement, requiring suppliers to meet **varying performance and evaluation requirements**

Many agencies use open tendering procedures for the procurement of supplies and services (works procurement is carried out principally using restricted tendering) primarily because of the requirements for transparency in the supplier selection process. However, the requirements for transparency must be balanced against efficiency in the process. In general,



agencies are **failing to exploit opportunities to reduce the tendering workload by the use of pre-qualification procedures** that would limit the number of suppliers from whom tenders would be received for individual contracts. This can result in unnecessarily long and complex evaluation processes, and wasted effort on behalf of unsuccessful suppliers.

**Draw down contracts are under-utilised** in many of the agencies reviewed (representing on average less than 40% of purchases and in a number of cases as low as 10 to 20%) and in general a high proportion of procurement is carried out on a once-off basis. As a result, there are many more transactions than are necessary, and agencies are losing opportunities to reduce purchase costs and improve service levels and quality through the use of aggregation.

### 3.2.8 Procurement Performance Management

In general, procurement performance management is **focused on compliance with requirements of internal and external audits** rather than on the overall effectiveness of procurement. Performance monitoring is limited, since objectives, targets and metrics are generally not established. This leads to a lack of focus on improving the performance of procurement activities. What cannot be measured cannot be managed. An exception to the above is the Dept of Health and Children where specific materials management related indicators are monitored as part of the service planning process.

### 3.2.9 Supplier Performance Management

With some exceptions, there are **no formal approaches in use to monitor supplier performance** during the period of a contract. Performance tends to be managed on an exception basis with individual issues being addressed as they arise. As a result agencies may suffer poor or inconsistent supplier performance, but have no means of measuring value for money nor rectifying problems.

### 3.2.10 Measuring Procurement Spend

In carrying out the analysis of the existing procurement environment, it was **not possible to obtain reliable information regarding existing spending patterns**, because agencies do not, in general, measure or analyse their procurement spend. An accurate and timely understanding of how much is being spent on different items is critical to enable effective procurement planning and management and facilitate the realisation of the benefits associated with eProcurement.

### 3.2.11 Consistency of Procurement Processes

While the health sector through the development of its Health Service Procurement Policy has sought to formalise procedures, thresholds and roles in most agencies procurements processes, in most agencies, procurement processes have evolved over time, based largely on the 'Green Book' guidelines and EU Directives<sup>3,4,5</sup>. There are **wide variations for similar procurement activities, particularly in the area of below EU threshold procurement**. As an illustration, one pilot agency requires three quotes for expenditure up to EUR381, while another requires only one quotation for expenditure up to EUR7,618.

The manner in which these processes have evolved has resulted in them being less than efficient in many cases and, with some exceptions, they have not been reviewed or re-engineered in the recent past. Inefficiencies identified in the pilot agencies included:

- Unnecessarily complex authorisation procedures, checks and sign-offs;
- Duplication of record keeping;
- Unnecessary reconciliation processes.

As a result of these inefficiencies there is a higher potential for errors, lead times can be less predictable, service levels less reliable, and process costs higher than necessary.

### **3.2.12 Order Fulfilment**

Fulfilment is a key aspect of procurement and becomes even more important in an eProcurement environment. While no assessment of fulfilment processes was carried out in the pilot agencies, the analysis undertaken provided indications that there is significant potential for redesign in delivery and logistics arrangements.

The use of service level agreements with suppliers to support effective order fulfilment was limited.

### **3.2.13 Budgeting Process**

Roll over budgeting is not generally allowed so funds are lost to the agency if they are not spent within the budget year. This 'spend or lose' policy reduces the effectiveness of the procurement process by encouraging poor procurement planning, inefficient procurement practices and reduced value for money. There is significant potential for improvement in this area if more flexible budgetary rules were applied which permitted the carry over of funding within a permitted framework.

## **3.3 Organisation and Management**

### **3.3.1 Existing Procurement Structures**

**Procurement is not generally viewed as a strategic support activity** within the public sector which can add value to organisations and assist them in achieving their overall service delivery objectives. It is viewed instead as an administrative function that focuses on carrying out and recording transactions.

In the main, **sectors and agencies have adopted a decentralised approach to procurement** in that individual Departments that control their own budgets are directly responsible for managing their own spend which includes sourcing suppliers, tendering, ensuring compliance with procedures and policies, ordering etc.

In addition, where a high degree of technical knowledge and understanding is required in the specification of requirements, tendering and management of contracts, responsibility for procurement tends to reside with the people and divisions who understand the specifications best.

While there is some evidence of formal and dedicated procurement structures, functions and positions (e.g. HMMB in the health sector) this is not the norm, and there are limited structures and forums to co-ordinate and foster co-operation in procurement activities within sectors and none across sectors.

Where procurement functions do exist within agencies, the head of the procurement function, in most instances reports to the head of other divisions such as finance or administration.

### 3.3.2 Procurement Skills Development

**Procurement skills within the pilot agencies tend to be focused on the operational and transactional elements of procurement** (e.g. tendering, contracting, ordering). There is little evidence of procurement skills in the strategic sourcing elements of the procurement process.

Where procurement is decentralised across agencies and sectors, operational and service line staff have, as an operational necessity, developed the skills associated with that element of the procurement process for which they are responsible and which are relevant to the level and category of spend for which they are responsible. However there is **little evidence of a formal approach being adopted to procurement skills development**.

**Difficulties have been experienced in attracting and retaining experienced and formally trained procurement staff** into the public sector and there are limited career development and promotion opportunities within procurement for such individuals.

### 3.3.3 Drivers of Current Behaviour

**The local delivery of services by agencies is a key driver of behaviour within the public service.** This, when coupled with factors such as autonomy and independence of functional areas, agencies and sectors, does not encourage behaviours of co-operation and co-ordination across agencies unless senior management at local or sector level perceive that definite benefits can be realised by focusing scarce resources on procurement.

**The current definition of procurement costs is also seen as a key driver of behaviour influencing the current approach to procurement.** Procurement costs are generally regarded as the cost of the individual item to be purchased and do not specifically include the additional costs such as those associated with the time required to prepare tenders, source suppliers, inventory holding and distribution costs and transaction processing costs.

### 3.3.4 Strategic Management Initiative (SMI)

The **Performance Management and Development System (PMDS)** currently being implemented under the Strategic Management Initiative<sup>6</sup>, entitled "Excellence through Performance - Moving Forward Together" is focused on clearly identifying individual roles and the range of competencies (i.e. the skills, characteristics and behaviours) that each person needs in order to fulfil their role within the civil and public service. The development and measurement of the procurement related capabilities necessary to support the introduction of eProcurement will need to take place in a manner that is consistent with the PMDS.

The on-going implementation within central government of the **Management Information Framework (MIF)** arising from the SMI Working Group on Financial Management in a Reformed Public Service is likely to see significant changes in existing financial management practices and organisation over the coming years. The eProcurement strategy needs to be implemented in a manner that is consistent with the MIF.

## 3.4 Technology

### 3.4.1 Existing Systems Landscape

Over the last three years there has been a **significant level of financial management driven investment** in software applications by the pilot agencies. This investment has also resulted in an upgrading of the procurement software applications within the pilot agencies.

The majority of the pilot agencies have, or plan to, **migrate to integrated software solutions** that provide the capability to support the financial management, procurement and materials management functions of the agencies within a single software application.

While the majority of the applications selected by the pilot agencies have **web enabled** features and provide some level of **support for XML** based data interchange **none of the pilot agencies have yet deployed these features**. In many cases agencies will be obliged to upgrade their application before they can avail of these application features.

Not all public sector agencies have enjoyed the same level of investment in integrated financial management, materials management and procurement solutions evidenced in the pilot agencies and therefore the overall **eProcurement solution will need to accommodate agencies with more limited information systems infrastructures**.

### 3.4.2 Existing Support for the Procurement Process

Based on the pilot agency responses there is considerable variation in the current level of system support for the procurement process.

The **sourcing and tendering** elements of the procurement process are largely manual, with only **limited evidence of electronic support**. The implementation of the ConVal electronic tendering initiative in the Local Government sector, and the [www.etenders.gov.ie](http://www.etenders.gov.ie) web site are exceptions to this.

There are **wide variations in the capability of existing systems to support the transaction elements of the procurement process**. However, the activities associated with order placing and approval, receipting and payment are largely manual.

The pilot agencies provided **no evidence of electronically exchanging procurement related documents (e.g. purchase orders) with suppliers**. While a number of the pilot agencies have automated support for the payment approval process **only one pilot agency provided evidence of paying suppliers electronically**.

A small number of the agencies surveyed are engaged in **vendor initiated eProcurement trials** and the majority of pilot agencies are currently receiving some supplier catalogues in an electronic format, usually CD-ROM.

### 3.4.3 Related eGovernment Initiatives

eProcurement is only one of a number of eGovernment initiatives currently taking place within the Irish public sector and the EU. It is important therefore that the eProcurement strategy is consistent, and where appropriate integrated, with these other initiatives.

The Third Report of Ireland's **Information Society Commission** (Dec 2000)<sup>7</sup> contains a number of recommendations in relation to eProcurement, which it considers to be an area where 'tangible benefits can be achieved relatively quickly'

*Provide a web-site giving information on public procurement by January 2001 and provide an integrated service in early 2002 (Ref Sec 6.3.2 Recommendations)*

*Create a framework for on-line payment to and from government by April 2001 (Ref Sec 6.3.2 Recommendations)*

The report also highlighted that the development of an advanced telecommunications network providing affordable access to bandwidth in all parts of the country as being essential for the creation of a dynamic and inclusive Information Society and a success e-economy. The provision of such an infrastructure will support the adoption of eProcurement in the public sector supply base.

**Reach** is the independent government agency established by the Irish Government to develop a strategy for the integration of public services and to develop and implement a framework for electronic government ([www.reach.ie](http://www.reach.ie)). The main elements of the framework established by Reach, which are relevant to eProcurement, are;

- The proposed single business identifier to be assigned through the Public Service Broker (PSB);
- The security infrastructure that will enable businesses to transact with the public sector in a secure manner;
- The content management framework for electronic information services developed by the BASIS project under the Reach initiative;

In addition to the national eGovernment initiatives the EU Commission's **eEurope 2002 Action Plan** sets out target delivery dates for eGovernment initiatives (including eProcurement) within the member states.

## 3.5 Economic Environment

The eProcurement strategy needs to be consistent with existing national enterprise/ economic policies including

- Promoting more balanced regional development;
- Improving growth in the output of the indigenous productive sector;
- Developing Ireland as a European hub for eCommerce.

The key factors that will determine the impact of eProcurement on the existing supply base and by extension, on the wider economy, are the profile of the existing supply base and the extent to which suppliers are electronically enabled. These factors are outlined below.

### 3.5.1 Profile of the Existing Supply Base

A review of the profile of supply to six pilot agencies indicated a series of common traits, these are summarised below:

- **Irish-owned suppliers account for a majority share of the *total* supply base (measured by number of firms)** across all categories of works, services and supplies procured. This dominance is more pronounced in the services category than the supplies category, and considerably more pronounced in works than in services or supplies.
- There is evidence across all sectors of a **strong local element** in the procurement of supplies, services and works. This is most pronounced in the case of works, but it is also evident in the case of services and to a lesser extent, supplies.
- **For agencies outside of Dublin**, the majority of locally based suppliers of supplies and services are **SME enterprises**.
- **Irish-owned suppliers typically account for a majority share of the *value*** of works procurement and a marginal majority share of the value of services procurement.
- The average **annual transaction value of Irish-owned suppliers** of supplies and to a lesser extent services is typically **considerably smaller** than that for foreign-owned suppliers.
- Without exception, **the Irish-owned supply base of supplies and services to each of the agencies reviewed is dominated by small and medium-sized enterprises (< 50 employees)**. Findings in regard to works were more mixed. The size profile of foreign-owned firms is characterised by a much higher share of non-SME firms.
- The majority of **Irish-owned suppliers** of supplies to all of the agencies **reviewed are not engaged in any form of manufacturing**. The respective share for foreign-owned companies is typically smaller.

### 3.5.2 eCommerce Readiness of the Enterprise Sector

In addition to the above, research findings in relation to the eCommerce readiness of the enterprise sector generally conclude that while there is a high level of awareness of eCommerce among Irish enterprise, this awareness has not translated very well into action. This awareness-action hiatus is particularly pronounced in the SME sector, where the poor state of eCommerce readiness has been described as a “major source of concern”<sup>8</sup>.

In summary, the profile of the supply base is characterised by a high share of Irish-owned small firms with low levels of Internet connectivity, and firms that have no manufacturing function.

This has implications for the nature of the eProcurement strategy as well as the timing with which the strategy is rolled out. An implementation approach that is too aggressive may run the risk of excluding a considerable proportion of existing suppliers and limiting competition in the supply base, with consequential impact on the national and regional economic performance.

### 3.5.3 *Supplier Viewpoint*

In order to understand the existing public sector procurement environment from a supplier's perspective a short questionnaire-based survey covering a number of small, medium and large enterprises currently supplying the public sector with supplies, services or works was conducted. While the views obtained are not necessarily representative of the whole public sector supply base because of the nature and limited size of the sample, they are nevertheless useful in identifying areas to be considered in the implementation of the strategy.

In general respondents rated their experience in dealing with the public sector in relation to procurement as positive but did highlight a number of potential areas for improvement including:

- The frequency with which potential suppliers are made aware of selection criteria used by the public sector;
- The level of feedback received from the public sector following the award of a tender.

Appendix E to this report presents a summary of the key findings.

## 3.6 Legal & Regulatory Environment

The legal and regulatory environment impacting on the introduction of eProcurement in the public sector is complex and evolving. The two principal sources of regulation are public procurement and eCommerce regulation, but other forms of regulation also impact on the project.

### 3.6.1 *Public Procurement Regulation*

The public procurement legislative framework consists principally of the EC Treaty<sup>9</sup>, the EU Public Procurement Directives<sup>3,4,5</sup> (implemented by way of Statutory Instrument into Irish law) and the World Trade Organisation Agreement on Government Procurement<sup>10</sup> (reflected in the last round of amendments to the Public Procurement Directives).

The **EC Treaty**<sup>9</sup> requires that the procedures used by public bodies in the award of contracts ensure non-discrimination, equality of treatment, transparency, mutual recognition and proportionality.



The **Public Procurement Directives**<sup>3,4,5</sup>, which enshrine the basic Treaty principles, coordinate the procedures for the award of public contracts above certain financial thresholds. There are separate Directives governing the classical public sector and the utilities sector, the latter sector being permitted a higher level of flexibility in relation to procedures. The Directives currently allow Member States to authorise the submission of tenders by electronic means, subject to certain conditions, but pose an obstacle to the exclusive use of electronic communications.

In May 2000, the European Commission published **proposed amendments to the procurement Directives**<sup>2,11</sup>. These will facilitate electronic procurement by contracting authorities by putting electronic communications on the same footing as conventional communications and by allowing them the option of using electronic communications to the exclusion of conventional forms of communication. Certain conditions are attached to the use of electronic tendering: the integrity of data and confidentiality must be preserved and it must be ensured that contracting authorities can only examine the content of tenders and requests to participate after the time-limit for submitting them has expired. In particular, any eProcurement facility will have to meet the requirements of Annex X to the proposed Directive, which are described in functional, technology-neutral terms (see Appendix I). The means of communication chosen and its technical characteristics must not impede suppliers' access to the tendering procedure and the technical specifications of all tools used for the electronic receipt of tenders/ requests to participate must be non discriminatory and available to all parties.

The proposed amendments refer expressly to the application of the Electronic Signatures Directive<sup>12</sup>. The principle of mutual recognition underlying that Directive will be important to the accessibility of an eProcurement system to tenderers from other EU states, as will be the availability of generally recognised standards for electronic signature products.

The proposed amendments also considerably liberalise the treatment, under the public sector Directives, of framework agreements, permitting an agency to re-open competition between the suppliers party to a framework agreement at framework contract stage.

The proposed amendments are unlikely to be adopted before **mid 2002**. Member States will then have **one year to implement** them into national law.

As part of its legislative package, the Commission adopted in August 2001 a proposal for a Regulation of the European Parliament and Council which would make the **Common Procurement Vocabulary** (CPV) the sole classification system used for public procurement in the EU. In addition, the Commission adopted in September 2001 a Directive on the use of **standard forms in the publication of public contract notices** (Commission Directive 2001/78). This Directive will introduce by 1<sup>st</sup> May 2002 modified standard form contract notices which are adapted to electronic submission.

It is important to note that the current EU procurement Directives do not appear to allow for the free use, by public purchasers, of all types of private sector eProcurement practices (for example, supplier driven dynamic eCatalogues or eMarketplaces). The proposed amendments, as currently drafted, will not change this position. However, there are member state proposals to liberalise the situation in relation to reverse auctions (see section 5.1.3.3.5). By the end of 2001, the European Commission intends to publish a **communication on the use of emerging eProcurement methods by the public sector** and the consultation process that follows may result in further amendments to the Directives.

### **3.6.2 eCommerce Regulation**

The principal sources of law in this area are the Electronic Commerce Directive<sup>13</sup>, the Electronic Signatures Directive<sup>12</sup> and the Electronic Commerce Act, 2000<sup>14</sup>. The Electronic Commerce Act implements the Electronic Signatures Directive and those parts of the Electronic Commerce Directive dealing with formation of contracts.

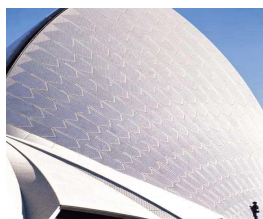
This legislation is largely facilitative of the introduction of eProcurement. The Electronic Commerce Act lays down the principle that electronic contracts, writing or signatures should not be denied legal validity solely on the basis of being in electronic form. The Electronic Signatures Directive deals with the form and recognition of electronic signatures, and sets out the parameters for the use and recognition of electronic signatures in dealings between individuals, commercial entities, and State authorities. It will be of particular importance in relation to the recognition by Irish contracting authorities of electronic signatures presented by contractors from other EU member states. Standards corresponding with the requirements of the Electronic Signatures Directive are currently being developed within the framework of the European Electronic Signature Standardisation Initiative.

### **3.6.3 Other sources of law**

Other sources of law also have an impact on this project, including competition law, Irish and EU Data Protection legislation and the Freedom of Information Act, 1997<sup>15</sup>.

### **3.6.4 Sharing of Information**

The introduction of eProcurement systems presents an opportunity to capture information at different stages of the procurement process. Information collected regarding suppliers may be subject to data protection and freedom of information legislation. It will be important to ensure that the information is objective, gathered in a fair and transparent manner and used for limited, specified purposes that are consistent with the public procurement Directives.



## 4 Strategic Objectives

### 4.1 Introduction

In order to guide the development of a strategy for eProcurement, and to ensure that priorities are agreed and understood, clear objectives must be defined and agreed by all stakeholders. In this chapter, we set out the objectives that were agreed following a process of consultation with sector representatives participating in the project and approved by senior management in each of the sectors.

For each of the objectives agreed, key performance indicators have been identified and targets proposed. These are set out in Chapter 6.

The recommendations for change in Chapter 5 set out measures aimed at addressing each of the agreed objectives, and Appendix J contains a summary of the recommendations related to each objective.

### 4.2 Strategic Objectives

***A) To improve service levels to buyers, suppliers and users involved in public sector procurement***

While the realisation of cost efficiencies is a key objective of the eProcurement initiative, cost is only one dimension against which procurement performance should be measured. It is also expected that the introduction of eProcurement and the associated procurement process related changes will contribute to improved service levels for all parties (buyers, suppliers and users) engaged in public sector procurement.

***B) To develop a more integrated approach to procurement across public sector agencies and sectors***

Co-operation across agencies and sectors is a pre-requisite to achieving many of the objectives set out here. The organisational structures recommended in this strategy should facilitate and encourage this, but significant changes in behaviour will also be required if co-operation is to be effective.

***C) To minimise the transaction costs associated with procurement through standardisation, streamlining and automation of the procurement processes within, and where appropriate, across agencies and sectors***

The analysis of the current procurement environment identified inefficiencies in the processes associated with the requisitioning, ordering and paying for goods and services. eProcurement, through the provision of automated support for the transaction related elements of the procurement process coupled with associated changes to the underlying business processes, affords the public sector the opportunity to realise efficiency gains through a reduction in the transaction costs associated with procurement.

***D) To maximise value for money for Irish public sector expenditure by enhancing the buying power of the public sector***

The focus of this objective is on leveraging the buying power of the public sector to improve value for money. This leveraging of public sector's buying power will result from agencies reducing the amount of non-contract purchasing, and from increased co-operation among agencies to combine their procurement requirements. The resulting increase in contract volumes can lead not only to a lowering of unit costs (through the realisation of scale economies), but also to more favourable service and quality terms for agencies.

***E) To promote competition among suppliers while maintaining reliable sources of supply***

This objective focuses on two elements – competition in the supply base and reliability of supply. eProcurement has a role to play in both. Experience elsewhere suggests that eProcurement can help to promote competition in the supply base by increasing suppliers' awareness of business opportunities through the electronic publication of tender opportunities and awards. eProcurement and associated supplier management practices can assist in developing reliable sources of supply by helping the buying agency to proactively manage its supply base.

***F) To optimise inventory levels and reduce associated costs through the adoption of efficient procurement practices***

The costs of maintaining inventory can in some instances represent a significant element of the total cost of ownership of supplies procured. There is potential for reductions in inventory levels and costs through the adoption of the procurement practices set out in this report.

***G) To make effective use of human resources in the procurement process***

Over time, through the standardisation and streamlining of processes facilitated by both the automation and process changes associated with eProcurement, there is potential to reduce the human resources required to support the transactional element of procurement activities. These resources can then be concentrated on either the more strategic elements of the procurement process (e.g. sourcing) or on the delivery of frontline services.

***H) To promote the use of eCommerce in the wider economy***

It is important that the eProcurement initiative contributes to the overall competitiveness of the Irish economy by having a positive impact on the level of eCommerce adoption within the public sector supply base.

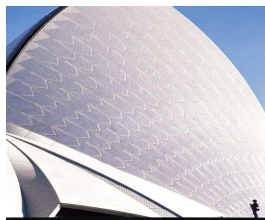
***I) To improve the auditability of public procurement expenditures***

The introduction of eProcurement in the public sector can contribute to improved recording, control and auditability of public sector procurement by increasing, through automation, the ease with which information can be recorded and retrieved.

The following chapter outlines the measures recommended to achieve the objectives outlined above.

***J) To be progressive in the adoption of procurement related Information and Communication Technologies (ICT)***

It is important that the Irish public sector is at the forefront in its use of ICT both as a stimulus for the enterprise sector, especially SMEs, to adopt modern procurement technology and also to ensure the overall competitiveness of our economy through reduction in the costs of transacting business with the public sector.



## 5 Key Recommendations for Change

The analysis carried out in the course of this study showed that, fundamental changes are required in the public sector procurement environment if the benefits which eProcurement can undoubtedly bring are to be achieved. The key changes that are required to achieve the objectives set out in Chapter 4 are:

- The establishment of a new framework for the management of procurement, based on international best practice;
- The establishment of appropriate organisation structures with the necessary resources and skills to drive the implementation of new initiatives;
- The introduction of effective and innovative procurement practices facilitated by electronic procurement techniques.

In this section we set out our key recommendations for the changes that are needed to bring about the required transformation.

A set of guiding principles governing the strategy to be adopted was developed and agreed with all stakeholders during the course of the study. These are set out at Appendix H.

## 5.1 Recommendations for Change - Procurement Practices and Processes

### 5.1.1 Introduction

The analysis carried out during this study indicated that procurement practice in the public sector falls some way short of international best practice in many areas. Set out below are some of the changes that are required if the objectives set out in Chapter 4 are to be met. The changes recommended are fundamental and broad ranging, and can only be effected on the basis of significant changes in organisation structures and responsibilities.

### 5.1.2 Procurement Management Framework

A new framework for the management of procurement should be introduced across the public sector, facilitated by new organisation structures at national, sector and agency levels.

A new, more professional approach must be adopted in order to elevate procurement expertise to a level capable of meeting the objectives. This will involve the introduction of new policies and practices, supported by the introduction of new skills. The initial requirement is for the introduction of a new management approach, based on *portfolio and category management*, as illustrated below.

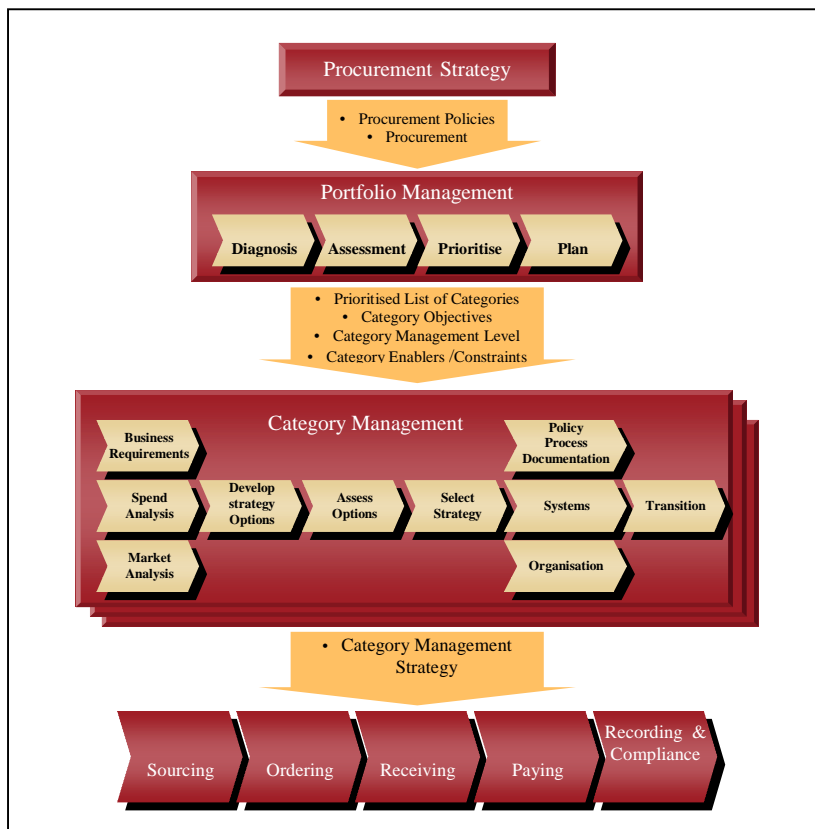


Figure 6: Proposed Procurement Management Framework

The framework comprises the following components:

**Procurement strategy** sets out the overall procurement objectives, targets and priorities for the organisation. This forms the basis for all procurement initiatives to be undertaken and provides an underlying policy framework within which portfolio and category management are carried out.

**Portfolio management** determines the approach to be adopted for the main categories of procurement by reference to their strategic importance and their overall spend. The portfolio strategy focuses on those categories of greatest importance, sets specific objectives to be achieved for those categories. It determines where they should be managed within the organisation structure, and allocates category managers.

**Category Management** identifies and selects the options for sourcing, contracting, order fulfilment and other aspects for each specific category of procurement. The category manager, usually supported by a multi-disciplinary sourcing team, then carries out the sourcing, specifying the needs, selecting the supplier, agreeing contracts, and specifying the ordering, payment and fulfilment processes. Ongoing contract management and performance monitoring is also undertaken by the category manager. The category management approach should assist in shifting the focus from price to the total cost of ownership.

This new approach to procurement must be driven from the top down. The full benefits of this approach cannot be realised by agencies working alone. The national objectives and targets proposed in this report should form the basis for the development of equivalent objectives and targets at sector and agency level. Portfolio strategies should be developed at national and sectoral levels that set out:

- The areas of expenditure where there is the most potential to achieve savings or improvements in service or quality;
- The categories of procurement, which would benefit from management at national or sectoral level.

For those categories designated as national or sectoral categories, category managers and sourcing teams should be appointed to develop category management strategies and to carry out the sourcing (selection, tendering and contracting) for those categories.

Some analysis carried out in the course of the study, and studies from other jurisdictions indicate that some of the categories that merit consideration for national or sectoral management include, among others:

- General Computer Equipment;
- Fuels;
- Office Equipment;
- Office Supplies;
- Travel;
- General Software;
- Telecommunications;
- Insurance and Banking.



### 5.1.3 Procurement Practices

Some of the main areas of improvement required are set out below.

#### 5.1.3.1 Aggregation

Procurement should be aggregated at the highest appropriate level in the public sector to optimise possible economic benefit.

Aggregation is defined as the consolidation of requirements for a given category of procurement for one or more agencies, using the aggregated volumes to obtain better contractual prices, terms and conditions than might otherwise be obtained. As well as these benefits, aggregation can improve process efficiency through a reduction in the number of tender competitions required.

Aggregation is not about central purchasing. It is about co-operating within and across agencies to improve procurement performance in sourcing and contracting, while facilitating buyers with more streamlined and responsive local requisition, ordering and payment processes. It is about leveraging the purchasing power of larger units, while at the same time ensuring that the delivery, service level and quality needs of individual purchasers are met.

Aggregation can be greatly facilitated by eProcurement, allowing users in different agencies to order electronically from a common contract facility.

Portfolio management strategies should identify opportunities for aggregation, and the level at which aggregation should take place for particular categories of procurement. It is essential that aggregation decisions are based on a good understanding of public sector expenditure, of suppliers and of the dynamics of the marketplace, and that they take into account variations in quality needs and service level requirements, ongoing costs of ownership and other factors, as well as the price.

They should take account of the risk that any short-term gains could be achieved at the expense of long-term damage to the market through, for example, removing possible efficient competitors for future contracts.

For this reason, they should be supported by ongoing research of the market trends and dynamics and supplier capabilities, and the strategy for each category of procurement should be subject to regular review by category management. Aggregation should be used only where it can be shown that there is long term national economic benefit to be gained. All proposals to aggregate procurement across agencies or sectors should be accompanied by a market impact analysis.

Aggregation should be used wherever feasible, and particularly where:

- Common goods or services are used across participating agencies, and common requirements and specifications can be agreed;
- The volume procured by the participating agencies is sufficient to generate significant economies of scale when aggregated;

- There will be no significant short or long term negative impact on competition in the market;
- Usage can be projected to a reasonable degree of accuracy.

A large proportion of the total cost of ownership is built in at the specification stage of the procurement life cycle and the opportunity to influence these costs diminishes rapidly as the procurement process progresses.

Aggregation should start, therefore, with sourcing teams concentrating on ensuring that specifications are appropriate to meet the needs of participating agencies, while being as standardised as possible.

From a legal perspective, the Public Procurement Directives<sup>3,4,5</sup> permit joint purchasing by contracting authorities, as long as transparency is maintained in relation to the identity of the contracting party/ies and the nature of the contractual relationship, and as long as the rules in relation to the aggregation of purchases for the purposes of applying the thresholds are appropriately applied.

#### 5.1.3.2 *Non-Contract Procurement*

Sector Procurement Units should initiate studies on the nature and extent of non-contract procurement, and determine opportunities for increasing the proportion which can be procured under contract through improved planning, increased aggregation, and standardisation of requirements.

One of the key issues observed in the analysis of the existing procurement environment was the scope for increasing the amount of contracted procurement taking place. Non-contract procurement (sometimes termed once-off or ad hoc procurement) usually results in higher prices and less favourable terms and conditions for the buying organisation.

One of the primary methods of achieving savings in overall procurement costs is to minimise the amount of non-contract procurement. Research by Gartner<sup>16</sup> and PwC<sup>17</sup> suggests that increasing utilisation of existing contracts alone can account for up to 65% of savings achievable. To maximise value for money, contracts should be in place, and complied with, for as large a proportion as possible of all expenditure. This objective should be incorporated into procurement policies at all levels, and portfolio management strategies should be designed to achieve this. Sourcing approaches should take account of the need to maximise compliance with contracts through, for example, approval and control systems that preclude or make it difficult to procure otherwise.

Contracting approaches such as those described below can be used to minimise non-contract procurement. For residual items that are not suitable for such contracts, particularly low value items, consideration should be given to the use of procurement cards, which operate much like credit cards, as possible approaches to reducing the level of administration involved.

### 5.1.3.3 *Supplier Selection and Contracting Approaches*

The public sector should fully exploit all contracting approaches which facilitate active competition in the supply base, increase flexibility in meeting users needs, and ensure fair treatment of all potential suppliers.

Public sector buyers have a number of objectives, some conflicting, to consider when determining which contracting approaches to use. These include;

- To reduce the number of tender competitions required;
- To improve responsiveness to individual users' needs by reducing the time required to complete the supplier selection process;
- To combine the procurement requirements of agencies to enhance buying power while at the same time meeting varying local needs;
- To facilitate users in taking advantage of rapidly changing prices and specifications while at the same time leveraging buying power through long term contracts;
- To provide an adequate choice of suppliers to users.

Various selection and contracting approaches are available to public sector buyers that can be used in different circumstances to facilitate meeting these objectives. eProcurement can greatly facilitate some of these approaches, which might otherwise prove to be operationally difficult. One of the key tasks of the procurement bodies will be to keep abreast of new and innovative approaches to contracting, and to disseminate best practice throughout the public sector. Some examples of the contracting approaches available are detailed hereunder.:

#### 5.1.3.3.1 **Draw Down Contracts**

A draw down contract is one where an agreement is entered into between the purchaser(s) and the supplier, and users can order from the agreed contract over a period of time. It may (but not necessarily) be in the form of a framework agreement. Draw down contracts are already widely used in the public sector, but there is significant potential for expanding their usage to minimise the amount of non-contract procurement.

#### 5.1.3.3.2 **Restricted Tendering**

Restricted tendering involves a two-stage process where, initially, suppliers are pre-selected for a particular contract on the basis of their financial standing and technical capacity. Tenders are then issued only to those pre-selected suppliers, rather than being advertised publicly, as in an open tender. The use of restricted procedure can significantly reduce the workload involved in tendering for both buyers and suppliers.

#### 5.1.3.3.3 **Framework Agreements and Framework Contracts**

Framework Agreements are arrangements between purchasers and suppliers under which the parties agree to the terms of their future dealings. They are generally used where the

purchaser knows that it will be making repetitive purchases over a period of years, and wants for this reason to enter into a long-term arrangement with a supplier or suppliers.

Constraints imposed by the current Public Sector Procurement Directives have limited the usefulness of framework agreements to date. However, the proposed amendments to the procurement Directives will significantly liberalise the rules on framework agreements, in particular, by permitting the agency to re-open competition at framework contract stage, where the framework agreement is with more than one supplier. These changes will greatly increase the usefulness of framework agreements, especially in an eProcurement context.

The framework agreement approach provides considerable flexibility:

- It can provide an effective way of contracting for the aggregated requirements of agencies working together;
- It can provide improved responsiveness to buyers as a result of the fact that there is no stated minimum period for responses for tenders for framework contracts;
- Unlike simple draw-down contracts which usually involve a single supplier, a choice of suppliers can be made available to buyers each time a requirement to procure exists;
- The possibility exists to divide contracts into lots based on a variety of factors, thereby allowing for varying requirements to be met by different suppliers (e.g. lots based on region or county);
- The option to re-open competition between the parties at framework contract stage will mean that agencies are no longer tied to fixed prices and conditions over the life of the framework contract; this flexibility will be of considerable benefit in markets which are changing constantly, such as that for information technology products and services.

#### 5.1.3.3.4 Prime Contracting-type model

A prime contracting-type approach could be used, under which the awarding authority appoints a contractor who takes responsibility for the co-ordination and management of the procurement of the goods or services required and for ensuring the delivery of those goods or services on time and in accordance with the requirements of the awarding authority. This “prime contractor” tenders on behalf of the awarding authority for each of the sub-contracts and enters into a contract with each of the sub-contractors (possibly with the awarding authority also having a collateral contract with the sub-contractors). Where the sub-contractor fails to perform his contract, the prime contractor could be held liable.

The use of such a prime contracting-type arrangement is particularly attractive where a number of agencies are purchasing together, as the prime contractor can take responsibility for co-ordination of the agencies. This approach could also be used where there is a large contract which the agency(ies) wish to award in lots. In this situation, the prime contractor goes out to tender to award each lot to a sub-contractor. However, careful regard would need to be given to the need for award criteria suitable for each lot.

The other main benefit of a prime contracting-type approach is that it introduces private sector co-ordination and management of the entire procurement process, up to the successful performance of the sub-contract. It therefore has the potential to reduce the tendering and contract management workload of the public sector.

### 5.1.3.3.5 Reverse Auctions

In a reverse auction, buyers specify the product they wish to purchase and a price they are willing to pay while suppliers of the product compete to offer the best price for the product over a predetermined timeframe. This results in dynamic competition and pricing that can be closer to true market pricing. A reverse auction is one of the approaches to supplier selection offered through eMarkets (see 5.1.4.3), and it is used mainly to procure commodity products that have a simple specification, and where factors other than price are not significant in the supplier selection decision.

From a legal perspective, insofar as reverse auctions involve a series of counter-offers it appears, under the current legislation, that they can only be used for above threshold purchases in circumstances where use of the negotiated procedure is permitted, i.e. for exceptional contracts under the Public Sector Directives<sup>3,4,5</sup>, and all contracts under the Utilities Directive<sup>18</sup> (e.g. drinking water). There is also a concern that any such reverse auctions should be devised in a manner that safeguards the confidentiality of tenders/bids during the bidding process. As there is no prohibition on the use of negotiation for the procurement of below threshold purchases, reverse auctions could also be used for such purchases, subject to the EC Treaty (see section 3.6.1) principles being observed.

The current version of the amendments to the EU procurement Directives would not have the effect of broadening the possibilities for use of reverse auctions. However there is now substantial support amongst Member States to amend the Directives to allow for the use of reverse auctions, (both generally and in the case of frameworks contracts) and we understand that it is likely that the text of the proposed amendment to the Directives will be altered in the near future to reflect this.

### 5.1.3.3.6 Combining Different Tendering Requirements

This approach envisages the situation where an agency or agencies need to procure a number of different categories of goods and services. Instead of going out to tender separately for each category of good or service, they instead opt to go out to tender, under a single procedure, for all of the categories, indicating that each category may be awarded in a separate lot.

One benefit of this approach is that it reduces the workload of the agency or agencies in relation to the tendering process itself. In addition, it can result in price savings in situations where the potential suppliers of each of the categories of goods or services form part of the same supplier base and, accordingly, a certain amount of leverage can be achieved.

From a legal perspective, it would be important to ensure that appropriate award criteria were applied to each of the different categories of good or service.

#### 5.1.3.3.7 Purchases below the EU thresholds

Purchases below EU thresholds are not subject to the procurement Directives, and therefore there is greater scope for the use of innovative supplier selection and contracting approaches, including those emerging through electronic eProcurement. The main requirement is that they comply with principles derived from the EC Treaty<sup>9</sup> (namely, equality of treatment, transparency, proportionality and mutual recognition). The availability of a government procurement web site or other electronic means of advertising below-threshold purchases will facilitate contracting authorities in achieving the requisite levels of transparency.

The European Commission communication on eProcurement, due out by the end of 2001, should provide guidance on electronic procurement of below-threshold purchases.

#### 5.1.3.4 *Supplier Performance Management*

A structured and objective approach should be adopted to the management of supplier performance. Common performance metrics and targets should be established using recognised external benchmarks where possible. Reporting and management processes should be developed to ensure that performance targets are met.

Supplier performance management involves adopting a structured approach to:

- Definition of relevant supplier performance metrics based on objectives to be achieved;
- Identification of required service levels and performance targets;
- Development of reporting and management processes to ensure that performance targets are met.

Service level agreements (SLAs) should be used to document this structure and approach to supplier performance management for the duration of the contract. The SLA should detail the requirements on both the supplier and the agencies in monitoring and managing the procurement contract. Performance information can be used to establish average performance levels and benchmarks across agencies and sectors.

#### 5.1.3.5 *Procurement Performance Management*

Procurement performance should be formally managed at agency, sector and national level. Performance objectives should be derived from overall agreed national procurement targets and should incorporate both quantitative and qualitative measures. Performance reporting should be used to drive management actions at all levels.

Procurement performance management should be used to ensure that procurement practices, processes, structures and systems are delivering value for money on an ongoing basis.

National level performance targets will be agreed by the NPU and the sectors. These will then be used by the sectors and agencies to set individual performance targets in the context of their own business plans. The targets should take account of factors particular to each sector

and therefore may not be uniform across sectors. The key performance indicators and targets set out in this report (see 'Strategic Objectives' section) should be the basis for procurement performance measurement.

Performance measures should be both qualitative and quantitative and should not focus solely on financial indicators. Transaction costs, procurement costs, service levels and quality should all be tracked on a regular basis against targets set.

Measurement approaches should be devised, and should above all, be simple, automated and not labour intensive. Where possible, statistical sampling approaches rather than systemised measurement should be used.

#### **5.1.4 Electronic Procurement Approaches**

##### **5.1.4.1 Electronic Tendering**

Electronic tendering can support the whole tendering process from tender document preparation through to tender award, linking buyers and suppliers using internet technologies. It can include the automation of:

- Requests for Information;
- Request to Participate;
- Requests for Proposals;
- Requests for Tenders;
- Tender processes within Framework agreements.

The benefits of electronic tendering can be significant, including improvements in the transparency, accuracy and efficiency of the process, as well as promoting greater competition in the marketplace through the broader reach provided by the internet. For works procurement in particular, contract management can be a complex activity involving the assessment of project completion and the certification of staged payments to contractors. Electronic contract management tools provide support for:

- Management of contract valuations;
- Management of contract payments.

The benefits of these tools are to increase the efficiency of the process, reduce errors and provide better management information to support decision making.

##### **5.1.4.2 Electronic Catalogue-based Procurement**

Electronic catalogue-based procurement (eOrdering) provides electronic access to product catalogues, using Internet technologies, allowing users to search for an item across one or multiple catalogues and to raise a requisition or order for the items selected. The goods and services that are suitable tend to be

- Items with non-complex and defined specifications;



- Items with recurring and regular purchases;
- Items can be ordered on a decentralised basis;
- Contracts that are in place for a period of time and where multiple purchases are made from the contract (e.g. draw down contracts).

The benefits associated with eOrdering include

- A reduction in the transaction costs associated with the ordering of goods and services;
- The provision of procurement management information on procurement;
- Increased compliance with centrally agreed contracts.

There is no legal constraint on the use of electronic catalogues that are controlled by the awarding authority and used as a tool to assist in the draw down of items from a contract that has been put in place between that awarding authority and a supplier. It is difficult, however, to envisage an application for dynamic, supplier-driven electronic catalogues that would be consistent with the provisions of the EU Procurement Directives<sup>3,4,5</sup>. (In a dynamic, supplier-driven catalogue, the supplier prices and specifications are not fixed).

#### **5.1.4.3 Electronic Marketplaces (eMarkets)**

eMarkets are on-line business trading communities that connect buyer and supplier organisations to facilitate electronic procurement of supplies and services. They offer various services, including quotation, tendering, auctions, catalogue-based ordering, and electronic payment. They can be built around vertical (industry specific) or/and horizontal (cross industry) markets. They can be owned either by a supplier, a buying organisation, a third party, or a community of trading partners, and operated either as private or public markets.

From a legal perspective, eMarketplaces may be used for below-threshold purchases, as long as the purchase requirement is properly advertised, all suppliers have open access to the market place and the other EC Treaty<sup>9</sup> principles are observed.

The current EU Directives impose a constraint on the use of such marketplaces for the selection of suppliers for procurement of above-threshold purchases. Nonetheless, this does not preclude the provision of other services required by the public sector (such as eOrdering from existing catalogues) through the use of eMarketplace facilities.

There is the possibility that in the future, these Directives will be modified to facilitate broader public sector participation in eMarketplaces for above threshold procurement.



### 5.1.5 Procurement Initiatives Recommended

#### 5.1.5.1 Development of a National Classification Scheme

The adoption and implementation of a national standard classification scheme for the identification of procurement categories and items should be managed nationally in co-operation with the sectors

A standard classification scheme for works, supplies and services will be a key enabler for procurement practices such as category management, aggregation, supplier management and performance management, as well as catalogue-based eProcurement. In order for the benefits of these practices to be realised, it is desirable that a common approach be adopted nationally.

Recognised international classification schemes (e.g.: EAN, NSV, CPV) exist, and it is likely that one or more of these could form the basis for meeting the public sector need for both category and item level coding. The likely need for sector variations should be taken into account in determining the appropriate approach.

Any new scheme should be implemented on a gradual basis, driven by the implementation of the various initiatives involving cross-sector co-operation in procurement.

The implementation of a national classification scheme should not necessarily require agencies to change coding schemes that may be built into existing systems. It should be possible to 'map' existing codes to the new codes as an interim measure, supported by electronic ordering systems.

#### 5.1.5.2 Standardisation of Procurement Policies

The development of national procurement policy, and the publication of national procurement policies and guidelines should be undertaken nationally in consultation with the sectors.

There is a need to replace the existing national procurement policies and guidelines publication, "Public Procurement" (also known as the 'Green Book') to bring it into line with modern electronic procurement practice, as well as updates in the regulatory framework. As far as possible, national policies should be developed. The policy needs of the sectors should be taken into account in the national policies, or through supplementary policies within the framework of the national policy.

Public sector procurement procedures should be designed and executed in a manner to ensure value for money (VFM). This policy should be reflected in any legislative and administrative provisions adopted relating to procurement.

### 5.1.5.3 *Standardisation of Procurement Processes*

The promotion of best practice procurement should be undertaken nationally. This will involve working with the sectors to:

- Develop and publish best practice processes ;
- Provide training to agencies in the implementation of these.

Agencies should also be encouraged to review their procurement processes and to avail of the services provided at national level.

Standardisation of procurement processes will also be driven by the introduction of cross agency sourcing and electronic procurement systems. Processes for ordering, receiving, payment and reporting will be determined as part of the implementation of cross-agency contracts, and would have to be adhered to by participating agencies. As this process will be led at national and sectoral level, this should ensure that there is consistency in the processes adopted across sectors and agencies, in line with national strategies and policies.

### 5.1.5.4 *Supplier Registration*

A National Supplier Register should be established for recording supplier details in order to improve the availability of supplier information and to reduce the duplication involved in maintaining separate supplier lists at agency level. Responsibility for management of the register should reside at National level.

Agencies should be required to recognise the National Supplier Register and should not oblige suppliers to provide information that is available via the register.

The register should, at a minimum, record items such as:

- Information related to the supplier that allows buyers to locate and identify the supplier. For example, business name, address, contact details;
- Information pertaining to the products and services that the supplier is interesting in providing to the public sector, based on the standard classification scheme.

Optionally, suppliers should also be permitted to register information that is requested as part of the every tender process, including items such as broader business descriptions, summary of annual accounts, tax clearance certificate, etc. Suppliers should be responsible for maintaining their own information on the register.

A single supplier registration process should improve the efficiency of the current procurement process by ensuring that consistent supplier information is available to all buyers in the public sector and should simplify interactions for suppliers, as there will be a single point of registration eliminating the need for multiple registrations across a number of individual agencies. It will also provide buyers with an accessible directory of suppliers interested in supplying the public sector and a summary of the products and services that they offer, as well as enabling suppliers to promote their products and services across the public sector.

#### 5.1.5.5 *Standardisation of Procurement Documentation*

The development of standard procurement documentation, taking account of sector specific needs should be managed nationally in co-operation with the sectors.

The adoption of standard documentation will:

- Eliminate duplication and 'reinvention of the wheel';
- Simplify interactions between buyers and suppliers as information is communicated in a consistent manner;
- Increase the level of compliance with regulations and policies;
- Improve the quality by reducing the level of errors and omissions;
- Improving the efficiency of the procurement process.

In general, those wishing to participate in cross-agency sourcing and contracting will be required to adhere to standard documentation.

Standardisation of documentation should be supported by electronic templates. The level of standardisation should be determined by the commonality of usage (i.e. sub-sector, sector, national) and the benefits to be gained through standardisation. Examples of documents for which standard templates could be developed are:

- Requirements specification;
- Request for Information;
- Request to Participate;
- Request for Tenders;
- Core Terms & conditions;
- Price schedules;
- Notices (to be standardised by EU from 1<sup>st</sup> May 2002);
- Model Contract Forms;
- Model Service Level Agreements.

## 5.2 Recommendations for Change - Organisation

### 5.2.1 Overview

Some of the key factors dictating the need for organizational change in the procurement area are outlined below:

- The need for leadership in delivering the eProcurement Vision;
- The introduction of new procurement-related skills at all levels in the public sector;
- The introduction and promotion of new procurement practices in line with international best practice;
- The exploitation of modern electronic procurement techniques and systems;
- The introduction of a new framework for the management of procurement, based on the concepts of portfolio and category management;
- The provision of leadership and co-ordination in promoting co-operation and combined procurement between agencies within and across sectors;
- The development and management of procurement standards;
- The promotion of consistency in procurement policies, practices, documentation and systems across agencies and sectors;
- The proactive management and measurement of procurement performance.

New organisational arrangements are required at all levels to meet these needs. The factors to be considered in determining the appropriate structures to be established are addressed below.

### 5.2.2 Organisation Design Considerations

The design of structures to support the needs outlined above must take into consideration:

- The almost complete absence of any procurement-related organisational arrangements in many parts of the public sector;
- The overall shortage of procurement skills;
- The need for a more focused and broader approach to procurement at a national and sectoral level

At present, there is no driver or motivation in the public sector for the realisation of the benefits of eProcurement and associated procurement best practices. Left unchanged, existing arrangements would not generate sufficient motivation to realise these benefits.

**Therefore, fundamentally new public sector-wide procurement organisational arrangements are required.**

Certain parameters governing the design of new arrangements emanate from the objectives and guiding principles of the strategy. Any new arrangements established should be designed to:

- Have regard for existing structures where procurement competencies and experience are already in place;

- Avoid duplication of investment in resources and systems;
- Facilitate communication and knowledge sharing across sectors and agencies;
- Elevate procurement in the overall list of priorities for public sector management;
- Facilitate co-operation in procurement at all levels in the public sector to optimise national economic benefit;
- Recognise the autonomy of agencies by promoting and facilitating rather than mandating their co-operation.

The organisation change recommendations focus on a number of key areas. These are:

- **Organisational Structures:** defining the organisation structures that are required to match skills and resources to the key tasks required to successfully deliver eProcurement across the public sector;
- **Integration Mechanisms:** setting out the key integrating mechanisms required to ensure that the revised structure operates effectively;
- **Resource Levels:** recommending appropriate resourcing complements for key structures;
- **Key Capabilities and Skills Development:** defining the key capabilities that need to be in place to effectively deliver the procurement practices recommended elsewhere in this report and how to develop them;
- **Change Management Activities:** setting out the key change management activities that will need to be considered and addressed during the implementation of the new strategy.

### 5.2.3 Organisational Structures

The foregoing requirements indicate a necessity for new organisational arrangements at national, sectoral and agency level.

#### 5.2.3.1 Procurement or eProcurement?

It is recognised that the success of eProcurement is fundamentally dependant on the introduction of improved procurement practices, and significant changes are required in this area if the strategy is to be implemented successfully.

Given the magnitude of the change involved, the opportunity exists to use eProcurement as the catalyst for the major shift in mindset which is required if the objectives of the strategy are to be achieved.

The rationale for recommending the structures outlined below is based on the reality of the fact that the strategy needs to focus as much on procurement practices as on eProcurement. However, consideration should be given to ways and means of reflecting the importance of eProcurement in the name and promotion material of each of the bodies concerned. Therefore the whole programme of change should be branded in a way that reflects *eProcurement*.

### 5.2.3.2 National Level

The objectives set out for the national strategy cannot be achieved unless there is a clear national focus on eProcurement. National functions must be established:

- To manage the delivery and roll-out of the national eProcurement strategy;
- To develop coherent national procurement policies and strategies and ensure their consistent implementation across the public sector;
- To prepare the required enabling regulations and legislation;
- To drive and monitor procurement performance at national level;
- To promote and facilitate national level initiatives such as :
  - The national management of contracts for some categories of procurement;
  - National eProcurement systems;
  - National procurement standards.
- To promote the adoption of best practice procurement across the public sector;
- To facilitate and co-ordinate the management of change associated with the implementation of new procurement practices, structures and systems;
- To facilitate the provision of appropriate resources and skills for eProcurement across the public sector;
- To facilitate and co-ordinate the provision of adequate funding for eProcurement initiatives.

This list incorporates both policy and operational level responsibilities. Experience suggests that strategic focus will be lost if a single body is charged with both the policy and operational aspects of implementing the strategy. For this reason, it is recommended that two new entities are established at national level:

- A unit focused on the development and oversight of national policy;
- A separate unit focused on facilitating and supporting the operational aspects of implementing the national strategy.

#### 5.2.3.2.1 National Policy

The Public Procurement Section (PPS) in the Department of Finance is currently tasked with certain aspects of public procurement policy:

- Public Procurement Legislation and Regulation;
- Procurement Guidelines / Green Book;
- Support for the Government Contracts Committee.

Successful roll-out of eProcurement will require a significantly greater focus on the development and implementation of clear and consistent national level policies and strategies. In addition to the above, the key responsibilities and activities outlined below, will need to be discharged at a national level:

- Setting national policy in relation to procurement;
- Monitoring national procurement performance and activity across the sectors;
- Facilitating and co-ordinating the provision of funding for eProcurement initiatives;

The existing policy remit of the PPS is much narrower than that required, and it does not currently have the capacity to undertake the additional responsibilities required. Furthermore, because of the importance of emphasising eProcurement as a new and separately ‘branded’ initiative, it would be best that a new unit be established for this purpose.

Therefore, it is recommended that

A new discrete, dedicated and properly resourced National Policy Unit\* should be established. Its role should be to define national procurement and eProcurement policy, and facilitate, co-ordinate and oversee its implementation across the public sector.

The relative standing/positioning of this unit within the public sector must be sufficient to support its role in developing national policy and co-ordinating the development of eProcurement across the public sector. The unit must also be able to operate effectively within the machinery of central government, while reflecting the issues and concerns of the sectors.

For these reasons, it is recommended that the unit be located within the Department of Finance. The exact location of the unit within the structure of the Department is a decision for senior management. In determining its location, however, consideration should be given to the synergies between its role in improving public sector procurement performance and the role carried out by that area of the Department which currently has responsibility for the effective management of public expenditure. It is recommended that the new unit subsume the national policy functions currently carried out by the PPS.

The suggested roles and responsibilities for the NPU are set out at Appendix A. Its focus will be on high level national policy rather than on operational issues. The unit should have the authority to acquire external skills and resources on a temporary basis as required.

#### 5.2.3.2.2 National Operations

Facilitating and supporting the operational aspects of implementing the national strategy will require the following key responsibilities and activities to be carried out at national level:

- Setting Operational Strategy for all aspects of procurement in alignment with National Policy;
- Devising and Issuing Standards and Best Practice;
- Monitoring sector procurement activities to ensure consistency of approach;
- Providing procurement, legal and systems support to public sector buyers;

\* National Policy Unit is a working title for the purposes of this report. A unique, discrete identity for this function should be agreed as part of the project to establish the function



- Providing and managing eProcurement systems and facilities;
- National performance reporting and management information;
- Promotion of eProcurement across the public sector;
- Change management of the eProcurement initiative;
- Determining national portfolio strategies, and managing those categories of procurement designated to be managed at national level.

No existing body carries responsibility for the development and implementation of public procurement operational strategies, and there is currently no body with a mandate to manage any operational aspect of public procurement at a national level. Most of the functions outlined above are not currently carried out anywhere.

Certain agencies, such as the Government Supplies Agency (GSA), the Healthcare Materials Management Board (HMMB), the Office of Public Works (OPW) and the Rail Procurement Agency (RPA) do have specific procurement responsibilities at a sectoral or sub-sectoral level, but none at a national level. The GSA, for example, has a remit for the procurement and supply of certain categories of goods in common use to central government departments. Its role, however, is much narrower than that proposed for the new body, in that it is confined to central government departments, and its function is limited to procurement on behalf of the departments concerned.

There is therefore a need for a new body to carry out the national functions identified. This body will have to meet certain key organisational requirements if it is to be successful:

- It must have sufficient standing and authority to operate effectively across the public sector;
- It must be designed to promote co-operation and buy-in at all levels across the public sector, particularly at sector senior management level;
- It must be seen to be independent, providing a high quality service to agencies and sectors wishing to avail of it;
- It must be able to provide a range of skills covering both public sector management and specific technical areas such as procurement, legal, electronic procurement systems, etc.

In order to meet these requirements, it is recommended that

- The function is separate from the National Policy Unit;
- It is a discrete structure, with appropriate authority;
- Its governance arrangements should facilitate representation of sector senior management;
- While it should have a core of public sector management expertise, it should be able to recruit required skills externally, both on a permanent and term contract basis.

A new discrete National Operations Unit (NOU)\*\* should be created. The NOU should be the body responsible for the implementation of national eProcurement strategy in alignment with national policy developed by the NPU.

The Department of Finance should be the parent Department for the NOU and it should facilitate funding and resourcing of the unit.

The suggested role and responsibilities of the new body are set out at Appendix A.

This recommendation is in line with approaches adopted in a number of other countries reviewed, where independent centralised units have been established to drive the implementation of their national procurement strategies and policies.

### 5.2.3.3 Sector Level

In order for the national strategy to be implemented successfully, it must be driven through the sectors, i.e. Health, Education, Local Government and Central Government. Much of the opportunity for co-operation in procurement resides within sectors, because greater commonality of procurement requirements exists and because some of the enabling factors required, such as common systems, communications channels and standards are already in place.

For these reasons, it is recommended that

Sector Procurement Units (SPU) should be established for each sector. Their role will be to implement sector level strategies in alignment with the overall national eProcurement strategy.

Their roles and responsibilities should be broadly similar to those of the NOU. The table at Appendix A sets out an overview of how responsibilities might break down between national and sector levels.

The organisation structures, staffing and location of the Sector Procurement Units should be determined by the sector parent Department, taking into account the requirements identified in the sector eProcurement strategies, which should be carried out as a priority. Any new structures to be established should take account of existing procurement units and bodies where they exist, and areas of potential overlap and duplication should be identified and resolved.

Central government should be regarded as a discrete sector for this purpose, having many of the characteristics of a sector as outlined above. Without a sector focus, central government departments and agencies are unlikely to achieve the degree of co-operation required to exploit opportunities for improved procurement.

\*\* National Operation Unit is a working title for the purposes of this report. A unique, discrete title for this function should be agreed as part of the project to establish the function.

Accordingly, the options for an SPU for central government should be examined and assessed. The Department of Finance should determine the approach for establishing this unit.

The role of the GSA must be considered in this regard. Its existing role encompasses a number of the functions envisaged for a Central Government SPU, including the management of certain categories of procurement in common use across the central government sector. However, it currently has no responsibility for managing the overall procurement performance of the sector, nor does it have any role in relation to procurement standards, training, support, promotion or eProcurement systems.

The GSA is responsible for managing certain categories of procurement and has for the last three years been developing the use of draw down contracts for these items. Where such contracts are in place, user satisfaction is monitored on an ongoing basis. The analysis exercise carried out also indicated that the GSA has technical expertise in relation to certain categories of procurement, which it uses to provide support to its customers in the requirements specification process. These activities are consistent with elements of the role of the Central Government SPU and should be considered in any study carried out.

A SPU for central government should be established by the Department of Finance. The role of the GSA should be taken into account in this regard.

In advance of the completion of this assessment, the sector procurement strategy for central government will be initiated by the NPU.

#### *5.2.3.4 Agency Level*

Existing Public Procurement Guidelines (1994 Edition) require that each contracting authority should designate an Officer at an appropriate level (usually Principal Officer or equivalent rank) to ensure that all matters relating to procurement in the relevant agency comply with legal and administrative requirements. This in itself will not be sufficient to effectively support the new procurement environment recommended in this report, which requires that the procurement function be proactive in ensuring that the agency obtains value for money. This may involve carrying out many new responsibilities, including

- Development and maintenance of a portfolio management strategy in alignment with sectoral and national policy
- Development of category management strategies for locally managed categories
- Strategic sourcing
- Contracting
- Contract management
- Supplier management
- Procurement performance management
- Reporting to sector level as required
- Participation in sector level procurement for a and sourcing teams
- Facilitating integration of agency level systems and national / sectoral systems

For many agencies these new responsibilities will require the establishment of a dedicated procurement function . Consequently, it is recommended that, on the basis of an assessment of the needs of specific agencies:

Sectors should facilitate the establishment of dedicated procurement functions in those agencies where they do not currently exist and where the level and/or complexity of spend would warrant it.

The organisation structures, staffing and location of Agency Procurement Units should be determined by the sector eProcurement strategies. Any new structures proposed should take account of existing procurement units and bodies where they exist, and should avoid areas of potential overlap and duplication.

Any new Agency Procurement functions should be positioned at a level in the structure consistent with the strategic importance of procurement in the agency. Agencies should avail of the support infrastructures provided at national and sectoral level.

#### **5.2.4 Integrating Mechanisms**

If the high level structures recommended in this report are to be effective they must be flexible enough to meet both national strategic objectives and the requirements of the sectors and individual agencies involved.

In addition to the formal structures outlined above a number of other more informal, but no less important, organisational entities will be required to ensure that the overall Procurement organisational model is effectively integrated. These include advisory boards, procurement forums and sourcing teams.

##### **5.2.4.1 National Procurement Advisory Board**

It is necessary to provide an effective consultation mechanism between the National Policy Unit, the National Operations Unit and senior management in each of the sectors, in order to reflect the views of the sectors in relation to key issues of policy and strategy, and to facilitate the buy-in of the sectors to the implementation of decisions arrived at.

A National Procurement Advisory Board should be established in order to facilitate consultation between the NPU, the NOU and the sectors to ensure that their views are taken into consideration in the development and implementation of national procurement strategy.

The advisory board should be established by the NPU as a matter of priority and chaired by the Head of the NPU and its membership should include IT and other relevant expertise from Department of Finance and senior management representatives of each of the sectors. These senior managers should be key decision makers within their agencies. Its role should be to facilitate sector senior management input into national policy development, and to approve national procurement strategies developed by the NOU in alignment with national policy.

It is also necessary that the views of other key stakeholders, such as suppliers, are taken into

consideration, particularly in relation to key decisions, which may impact them. Mechanisms are required, therefore, to facilitate ongoing consultation with these key stakeholders. Appropriate mechanisms for consulting with such stakeholders should be devised by the advisory board.

The functions of the National Procurement Advisory Board are also relevant to sector procurement units. Sectors should decide on the appropriate structures to carry these out, and rather than establishing new structures, may consider how these functions could be integrated into the responsibilities of existing sectoral representative groupings such as, for example, the County and City Managers Association (CCMA) in the Local Government sector.

#### **5.2.4.2 National Procurement Managers' Forum**

Procurement managers across sectors and agencies will be key to the success of the strategy. It is essential to put in place a mechanism, which will facilitate:

- contribution by the sector procurement managers to the development of national procurement strategies, objectives and targets, and to the development of the national portfolio management strategy;
- buy-in by sector procurement management to national policies and initiatives;
- procurement knowledge transfer across sectors, including sharing of best practice;
- resolution of common procurement issues.

A National Procurement Managers' Forum should be established to provide the opportunity for Procurement Managers in the sectors to come together periodically to share views, and to provide their inputs into national initiatives and policies.

The Forum should be chaired by a senior representative nominated by the Head of the NPU and will have representation including IT and procurement expertise from the NOU. It should meet on a regular basis. Similar forums should be considered as communications and integration mechanisms within sectors and sub-sectors.

#### **5.2.4.3 Sourcing Teams**

In order to ensure that national category management strategies adequately address procurement needs, it is important to involve multi-disciplinary teams in their development. These should include, at a minimum:

- Procurement specialists;
- Users;
- Technical Specialists in the categories concerned;
- Financial specialists.

It is important, also, that the views of participating agencies are adequately represented in the development of national category management strategies. For these reasons, it is recommended that

Sourcing teams should be established by the NOU to assist in the development of category management strategies, and to carry out strategic sourcing for categories to be managed at national level. They should be chaired by a category manager appointed by the NOU, and should comprise multi-disciplinary teams drawn from the sectors

Sourcing teams would be established for the duration of the strategic sourcing process, from specification of requirements through to contracting. At this stage they would be disbanded. Responsibility for ongoing contract and supplier management would then reside with the NOU category manager.

Similar sourcing teams should be formed within sectors for categories to be managed at sector and sub-sector levels.

#### 5.2.4.4 Summary of Organisational Arrangements Proposed

The proposed organisation model\* is illustrated below:

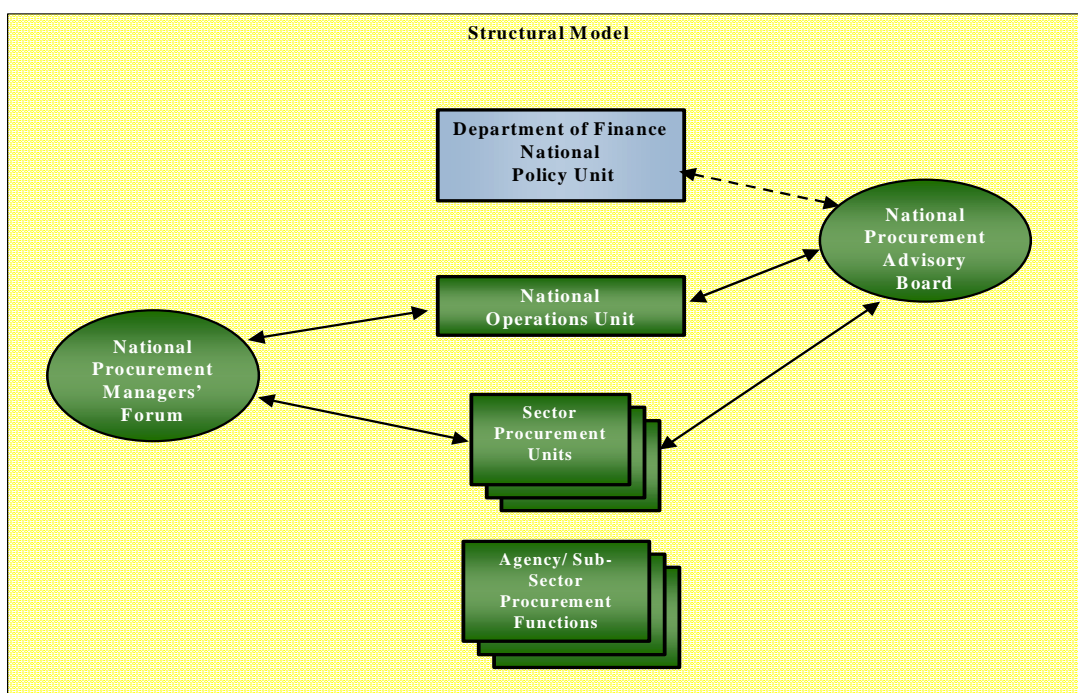


Figure 7: Proposed Organisational Model

\* The titles for the positions referred to are working titles only. Formal titles will be chosen when the units are being established.

### 5.2.5 Resourcing the Model

It is critical that the structural model set out in this report is appropriately resourced if it is to be effective. Resource and skill levels should be matched to the key tasks required within each of the bodies recommended in the strategy. Set out below are recommended resource complements for the National Policy Unit and for the National Operations Unit. These recommendations will be further examined when these units are being established.

Recommendations on the appropriate resource complements required for sectoral and agency units should be developed as part of the sectoral strategies.

As a comparison, in the UK, the NHS Procurement and Supply Agency which has a spend influence of Stg£2bn, has a staff of 350 and an annual budget of Stg£19.5m.<sup>19</sup>

#### 5.2.5.1 National Policy Unit

The NPU should be established as a line unit within the Department of Finance and should be structured along the following lines:

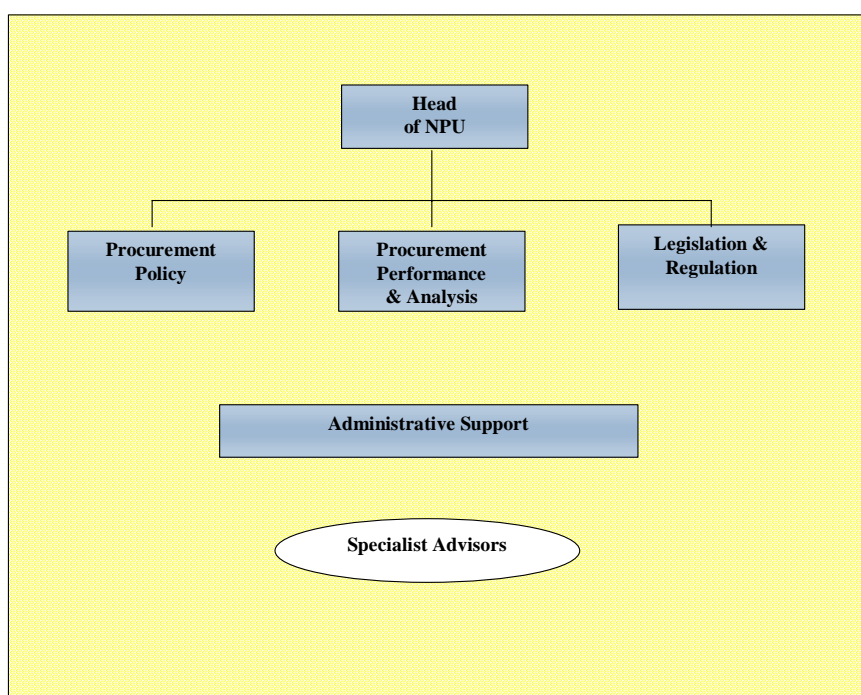


Figure 8: Recommended Structure for National Policy Unit

The model set out above comprises a number of discrete units supported by administrative support personnel. In carrying out the work of the Unit it is also likely that there will be a need to draw on the services of specialist advisors, for example procurement or legal specialists. Where this advice is not available or easily accessible within the public sector, qualified external advisors should be engaged under framework agreements or term contracts.



It will be essential that the NPU effectively engage with the NOU and with the sectors in developing its policy agenda. The key mechanism for engagement will be the National Procurement Advisory Board, where the NPU will consult with the NOU and sector senior management on national policy.

The NPU will be staffed with permanent civil servants, personnel seconded from other areas of the public sector and staff on term contracts. The initial management and executive staffing level required to establish the NPU (over and above manpower resources subsumed from existing PPS) is estimated to be 4, supported by 2 clerical/administrative personnel. In the longer term it is likely that this number will need to be increased. Whilst this will be a matter for Government to decide, it is our view that the total staff complement will be in the region of 10 – 14.

### 5.2.5.2 National Operations Unit

The NOU should be structured as outlined below. In carrying out its work the NOU will require specialist expertise in addition to the core public management expertise found in the public service.

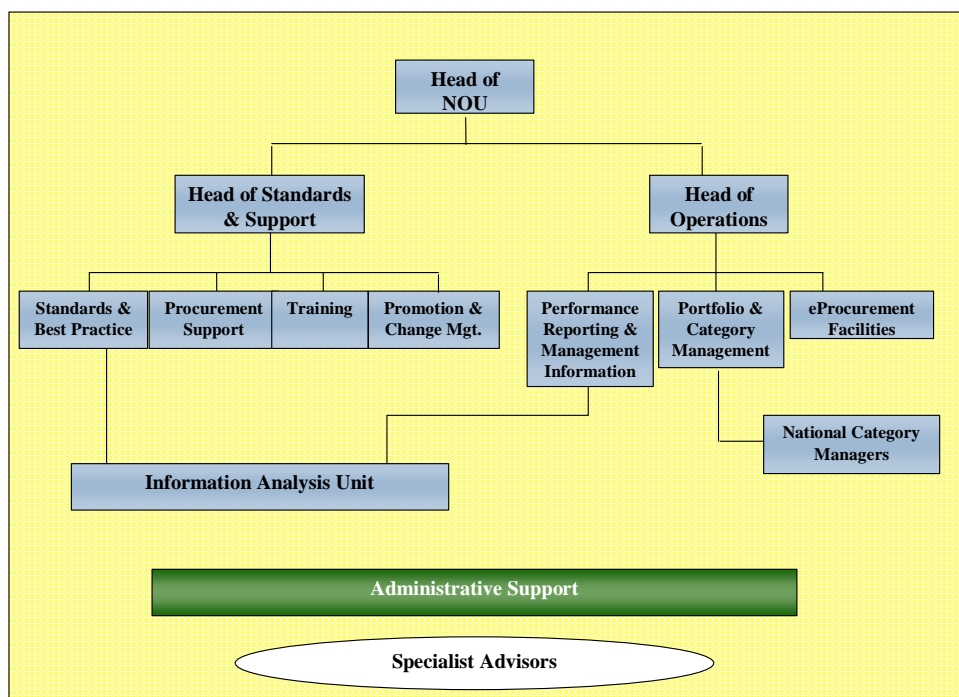


Figure 9: Recommended Organisation Model for The NOU

Initial estimated resource requirements\* for the recommended model are in the order of 12 – 15, plus administrative support. It is anticipated that this will grow significantly in the future

\* These are estimates of the resource requirements necessary to establish the NOU. A more detailed assessment should be made as part of the actual process of establishing the NOU. It is important that surplus resource is not put in place early in the process in advance of work actually existing for the NOU. The resource numbers set out above are scalable and should grow in line with the increased volumes of work required as the eProcurement strategy is rolled out.

as additional national categories and eProcurement systems come on stream. It is recommended that core staffing be kept to a minimum, but should include expertise in all of the key areas such as legal, procurement, systems and training. Administrative support for the NOU will include internal support services such as HR, Finance and IT.

The unit should draw on the services of additional specialists, as the need arises. The manner in which these resources are engaged will vary but it is likely that the NOU will have an employment mix of full time public servants, specialists engaged on term contracts and bought in advice.

The estimates above make no provision for the operation of the eProcurement facilities or for support arrangements (e.g. call-centres) for users, buyers and suppliers. It is recommended that both these tasks are outsourced.

The NOU should also second procurement professionals from the sectors to work in the unit. This will greatly facilitate understanding and co-operation between the NOU and the sectors.

Managers of the key functions in the NOU should be at a senior level consistent with the responsibilities of the post and possess the competencies required to meet the demanding specifications of the position. The NOU may be headed by a senior public servant, although consideration should be given to appointing an experienced individual from outside the public sector.

#### ***5.2.5.3 Immediate Organisational Initiatives Required***

It is essential that the National Policy Unit, as outlined in section 5.2.5.1, be established on a permanent basis as a matter of priority.

It is recognised, however, that full establishment of the NOU and other elements of the national procurement structure, may take some time and that these structures will evolve during the early stages of the implementation phase. To facilitate the speedy implementation of the national strategy, interim operational arrangements are required. It is proposed that some of the national entities are set up on a temporary basis for an interim period of at least 12 months. At the end of this period a review, incorporating significant input from the members of the temporary bodies, would be carried out to determine their longer term position in the overall procurement structure.

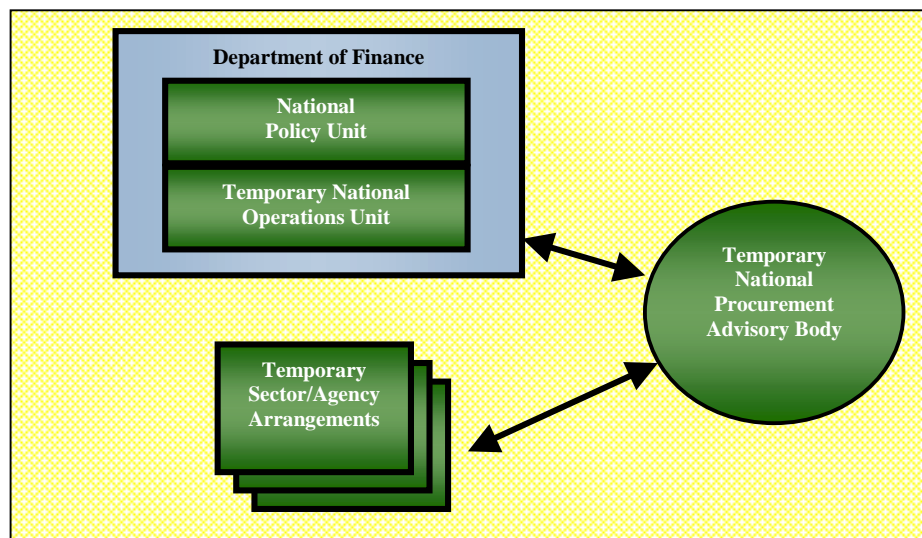


Figure 10: Interim Organisational Arrangements

It is recommended that a discrete temporary unit be set up as soon as possible, tasked with managing the implementation of the early national operational initiatives recommended in this report. In particular it should play a key role in the establishment of the permanent National Operations Unit in consultation with the sectors. This temporary unit should be established within the Department of Finance so that it can work closely with the NPU, and be in close proximity to the skills and expertise required, such as public policy, ICT, training and change management. The unit should be staffed with permanent civil servants, personnel seconded from other areas in the public sector and staff on term contracts. Key priorities in the initial stages should be to provide support for sector procurement initiatives, to initiate the development of training programmes and to initiate the process of developing standards.

It is essential that this unit works closely with the NPU in a teamwork environment during the interim period to sustain momentum and drive the initiative forward. The immediate priority tasks for the NPU and the interim operations unit are set out at 7.4 (The Way Forward).

At sector level, one of the early initiatives to be undertaken is the development of individual sector based procurement strategies. It will be necessary to put temporary structures in place to ensure that this work is carried as soon as the national strategy has been approved. The associated funding, resourcing, training and skills development issues will need to be addressed in implementing these arrangements. Ultimately these will be replaced by the permanent sector and agency level bodies as outlined in section 5.2.3.3.

The Procurement Managers Forum will initially be set up on an informal basis as a cross-sector and cross agency group of senior procurement managers whose primary role will be to share information and assist in the formulation of national operational policies. It is important that the group is representative of the sectoral and geographical aspects of the public sector. Initially the main interaction would be through workshops and conferences.

The National Procurement Advisory Body should be set up to facilitate sector senior management input into national policy development, and to approve national procurement strategies developed by the temporary NOU in alignment with national policy. This group of

senior managers would meet on a regular basis for the initial interim period and would also incorporate contributions from other key stakeholders such as suppliers.

The interim arrangements should remain in place until the permanent structure has been established. This would also allow the experience gained in the initial period to be incorporated into the establishment of the permanent structure.

### 5.2.6 Training

As set out in Chapter 3 (Overview of Procurement in the Public Sector) above, there is no formal, standardised approach to the development of procurement skills in the public sector. This has resulted in a deficit in terms of the key skills required to implement effective procurement practices. This situation is further compounded due to difficulties experienced in recruiting and retaining individuals with the required skills in the current tight labour market.

In order for the procurement strategy to be effective certain key capabilities, relating to the effective implementation of recommended procurement practices, need to be developed over time across the public sector.

The National Operations Unit, in consultation with the sectors, should develop and facilitate the implementation of a national procurement training plan

Training in the following key areas of procurement will be required by dedicated procurement staff, and to a lesser extent by users:

- 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.

This change will present varying degrees of challenge depending on current procurement arrangements within agencies and sectors.

### 5.2.7 Change Management

The realisation of the objectives and benefits associated with the National Procurement strategy contained in this report is dependant upon the successful implementation of a number of key initiatives and recommendations. However, a number of factors impacting the public sectors' capability to change will have to be addressed if the implementation of these initiatives is to be successful.

The key change management issues that emerge within and across each of the key recommendations and initiatives, and the requirements they generate:

- The adoption of a new Procurement Management framework and procurement practices;
  - The buy-in and support by senior management, users and suppliers to the objectives and benefits of the National strategy and the associated initiatives;
  - A change in behaviours and attitudes to support the approach to procurement and the Procurement management framework. This will require, in addition to the necessary infrastructure and support mechanisms being in place, a change in the common understanding of procurement costs from item costs to the concept of Total Cost of Ownership;
  - Changes in work practices at the agency level by dedicated procurement personnel and users currently involved in different aspects of procurement;
  - The establishment of a climate of co-operation and co-ordination between functions, agencies and sectors.
- The establishment of new procurement structures at the national, sector and agency level;
  - The recognition of procurement as a strategic support function;
  - Addressing concerns relating to local autonomy and decentralised decision making and how new national and sector structures and procurement practices will impact this be addressed;
  - Addressing concerns, at agency and Sector level, relating to need to deliver services on a local basis and how the new approach to procurement will impact this;
  - The means to attract, develop and retain procurement competencies within the public sector.
- The implementation of national, sectoral and local eProcurement systems;
  - The agreement and support of agencies for national and sectoral systems;
  - The promotion of the benefits of such systems in order to establish the required levels of confidence in being able to meet local requirements;
  - The obtaining of supplier support for the utilisation of such systems;
  - Converting individuals from a reliance on and preference for predominantly locally developed and trusted manual processes to electronically based processes;

- Providing individuals with the confidence that information provided electronically is current and reliable in terms of meeting local needs both in terms of quality and responsiveness;
  - Addressing concerns that personal contact will be reduced and that local supplier relationships will be negatively impacted;
  - The capacity to implement and manage the system and information on a local and sector basis.
- The introduction of Procurement Performance Management;
    - That the purpose for which this information is required be explained and agreed with agencies and Suppliers if the information is to be provided and their co-operation is to be forthcoming;
    - That agencies and sectors be actively involved in the development and setting of these of targets and objectives if they are to be accountable for procurement performance and the achievement of these;
    - That the approach to procurement performance management and the setting of objectives be incorporated into the broader performance management development initiative underway within the public sector under SMI<sup>6</sup>;
    - The inclusion of performance measures that reflect the desired behaviours associated with the new Procurement Management framework into the broader Performance management Development initiative.
  - The development of a National Classification Scheme and the standardisation of Procurement policies, documentation and technology standards.
    - The agreement and support of agencies for National standards;
    - The recognition and reflection of the diversity of activity and approach across the different sectors within the public sector, and hence the need to reflect and manage local needs and requirements;
    - Acknowledging the independence of certain agencies within the public sector.

In light of the above

A key element of implementation should be the development and implementation of a Change Management approach and plan. Change Management plans will need to reside at an initiative level, be this at the agency, sector or national level.

For national level initiatives it is recommended that the National Change Management plan be managed and co-ordinated by the NOU – eProcurement Promotion and Change Management function and that this function support and co-ordinate the development of similar plans at the sector and agency level.

## 5.3 Recommendations for Change - Technology

### 5.3.1 Overview

The purpose of this section of the report is to outline the technology framework recommended to support the:

- Development of eProcurement within the Irish public sector;
- Implementation of the recommended procurement practices and processes.

The technology framework recommended has been developed to support the procurement process from initial sourcing through to final payment taking into account the recommended procurement practices in the previous section. Some of the key practices that will be supported are:

- **Facilitation of aggregation and Portfolio and Category Management** through the provision of accurate and timely information;
- **Reduction in non-contract procurement** by providing users and buyers with information about available contracts and access to these contracts;
- Supporting the **Supplier Selection and Contracting** approaches through electronic tendering and electronic ordering solutions;
- Provide a means of implementing **Supplier and Procurement Performance Management**;
- Increase the adoption of **standard documentation** and the availability of this documentation.

The implementation of eProcurement services will also enable the public sector to meet its obligations under the **eEurope Action Plan 2002**:

The technology framework should be viewed in the context of other related Government initiatives outlined in Chapter 3 Section 7 such as:

- Reach and the Public Service Broker;
- The implementation and roll out of a Managed Data Service to Support the Electronic Delivery of Public Services and the associated Virtual Private Network (VPN);
- The Management Information Framework within the Strategic Management Initiative;
- Recommendations in the Third Report of Ireland's Information Society Commission (Dec 2000)<sup>7</sup>;



### 5.3.2 eEnabling the Procurement Process

The eProcurement Technology Framework is presented below.

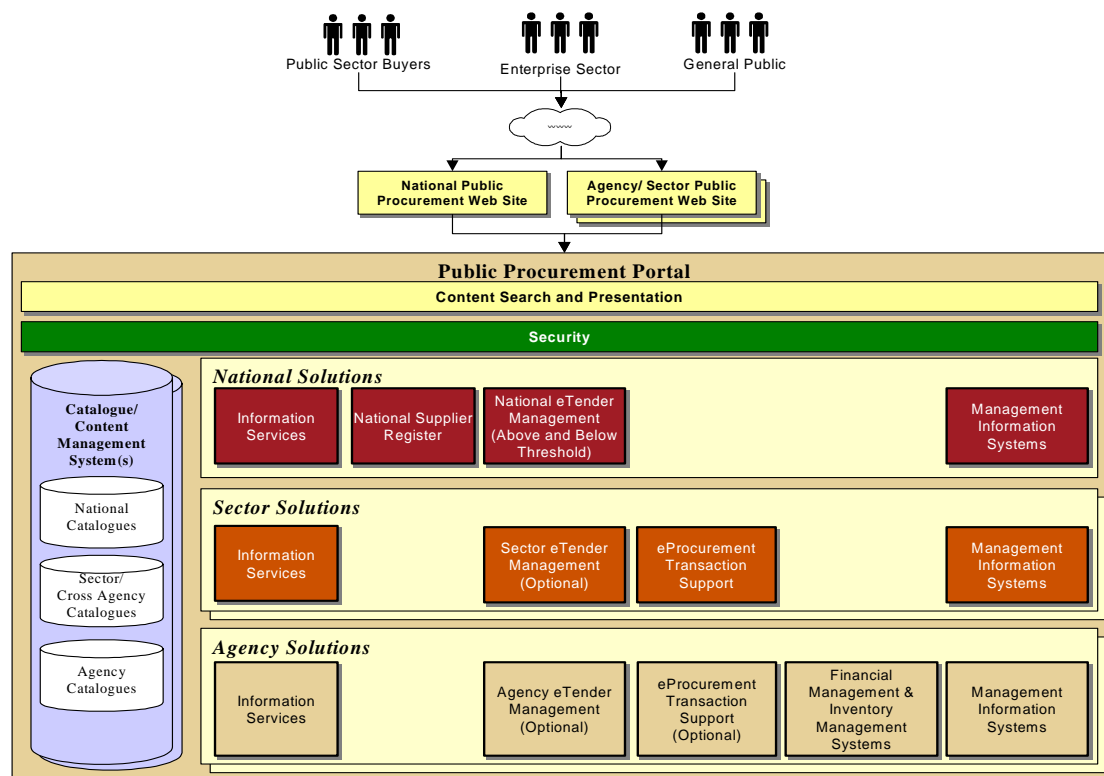


Figure 11: eProcurement Technology Framework

The technology framework provides public sector buyers, suppliers and the general public with secure access to an integrated range of procurement systems and services, using Internet technology. A Public Procurement Portal will provide the main 'gateway' to all of the facilities, but they will be accessible also through various sector and agency web sites.

National solutions, which will be managed by the National Operations Unit, will be provided for:

- A **national supplier register**, which will record basic details of suppliers interested in doing business with any part of the public sector;
- A **national eTendering system**, which will facilitate the online advertising of tenders, and the secure transmission of electronic tender documents between buyers and bidders for public sector contracts;
- **Information Services**, giving access to public sector procurement-related information such as news, publications and policies, as well as discussion forums;
- **Management information** on procurement, such as performance data and trends;

Agencies in all sectors will use the national supplier register and the national eTendering system. Sectoral or local eTendering systems may also be provided, but they must link to the national system to provide a single view of all opportunities and awards.

Catalogue-based ordering systems will be provided at sector and agency level. They will provide public sector buyers with facilities to order from online catalogues of goods available under contracts agreed with suppliers. These systems will provide for various means of integration with agencies' financial systems to record the transactions carried out. The catalogues made available to buyers through the ordering systems may reside at national, sectoral or agency level, depending on the level at which the associated contracts are managed.

As the primary access mechanism for the recommended eProcurement services and systems will be via the Internet, users within the public sector will require access to the internet/ corporate intranet to participate in eProcurement.

### **5.3.3 eEnabling Suppliers**

The ability of suppliers to engage in eProcurement will be critical to the success of the eProcurement initiative. There are two key elements to be considered as part of the implementation of the eProcurement Technology Framework.

The first is the technology and infrastructure required by suppliers to participate. The supplier side technology requirements should be minimised such that suppliers require only a PC, browser software, modem and internet access. In situations where suppliers are required to download software to interact with the public sector for eProcurement purposes, (for example tender management templates and documents, security software), they should not incur charges for this software.

This principle of minimising supplier side software should be included within the evaluation criteria used to select solutions as part of the eProcurement Technology Framework.

The second element to be considered during the implementation and deployment of eProcurement is the ability of suppliers to provide catalogues in electronic form and in accordance with the classification scheme developed. Any lack of supplier readiness to provide electronic catalogues may impede the progress implementing and rolling out catalogue-based ordering systems and thereby delay benefits to be achieved from the investment in these systems. In identifying possible categories of goods and services to be supported by catalogues based ordering systems, due regard for supplier ability to provide electronic catalogues should be taken.

The following pages contain a further explanation of the framework, along with specific technology recommendations.

**5.3.4 Information Services**

A National Procurement Website should be provided to act as a gateway to procurement related services for public sector buyers, suppliers and the general public

The national website will be an access facility as well as providing procurement related information to public sector buyers, suppliers and the general public. It will facilitate navigation to various systems and information sources at national, sectoral and agency level.

A Content Management Framework for procurement should be devised to cater for all procurement-related information accessible via the National Procurement Website.

This framework will define inter alia, content templates, technology standards, meta data standards, content design and editorial and approval processes. This framework should be consistent with the content management framework being developed as part of the BASIS project under the Reach initiative.

Content for procurement-related information, made available through the national web-site should be managed at a national level.

The diagram below illustrates the type of information that might be available.

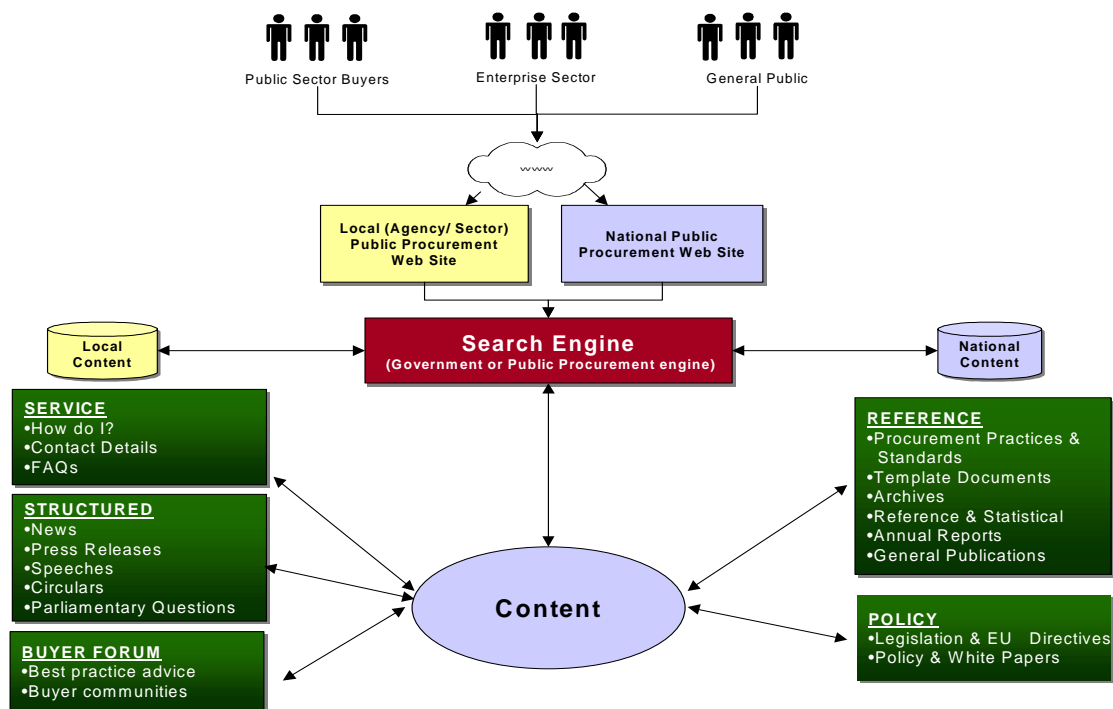


Figure 12: Information Services

### 5.3.5 Supplier Registration

The national supplier register, as described at 5.3.3.5 above, will record information on suppliers interested in supplying to the public sector. It will be optional for suppliers to register.

#### *Supplier Information Stored*

Four categories of supplier information have been identified for possible inclusion within the register. These four categories are:

<i>Level 1</i>	<i>Identification Information:</i>	Information related to the supplier that allows buyers to locate and identify the supplier. For example, business name, address, contact details
<i>Level 2</i>	<i>Product and Service Information:</i>	Information pertaining to the products and services that the supplier is interested in providing to the public sector. This will probably be a multi-choice list of categories of goods and services based on the categorisation approach implemented. Some extra information maybe required for specific categories of goods/ services
<i>Level 3</i>	<i>Standard Tender Information:</i>	Information about a supplier that is requested as part of the every tender process. This is an expansion on the identification information to cover things such as broader business descriptions, summary of annual accounts, tax clearance certificate, etc.
<i>Level 4</i>	<i>Tender Specific Information:</i>	Information that a supplier provides which is unique to an individual tender (e.g. pricing information, track record in a certain area, etc.)

The first 3 levels of information should be stored within the Supplier Register. For those suppliers who do wish to register, level 1 and 2 would be mandatory and level 3 optional for suppliers to complete. Care would need to be taken in the future that any necessary links are maintained between the Supplier Register and the Public Services Broker (PSB), an initiative being undertaken as part of the Reach programme, to share basic information stored on businesses.

#### *Supplier Identifier*

A unique identifier will be required for all suppliers wishing to register. It is likely that the business identifier being developed under the Reach programme will need to be supported by a Supplier ID at the appropriate business entity level. This will require further analysis of decisions in relation to the business identifier are progressed.

#### *Overview of Operation*

The following diagram provides an illustration of how the register may operate with suppliers accessing the service via the web or via a support centre and buyers retrieving information from the register via the web. The diagram also shows potential links to the Public Service Broker to 85 information from here as well as links to Revenue for Tax Clearance certificates.

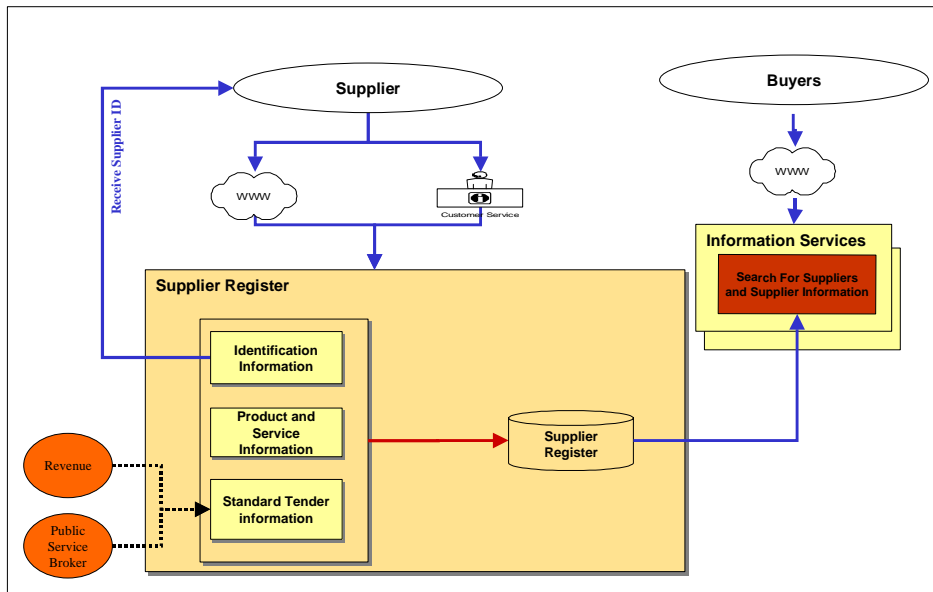


Figure 13: Supplier Registration

### 5.3.6 eTender Management

An electronic Tender Management facility should be provided at national level to support both above and below EU Threshold tenders for supplies, services and works contracts. Sectors/agencies may choose to implement local tender management solutions. However, where local (sector/agency) tender management solutions are deployed the national facility should provide visibility of such tender notices, documents and awards.

The rationale for providing a National eTender Management facility is:

- To provide economies of scale and minimise the cost of implementing multiple solutions to meet the requirements of the EU Directives;<sup>3,4,5</sup>
- To provide a single security infrastructure to meet the requirement of the EU Directives;
- To be consistent with the existing [www.etenders.gov.ie](http://www.etenders.gov.ie) initiative;
- To meet obligations under the eEurope Action plan;
- To provide the consistency of approach and process to suppliers.

Tender Management is defined to cover the process from tender document preparation through to tender award. The scope of the eTender Management component is to cover all RFx types processed including:

- Request for Information;
- Request for Proposal;
- Tender processes within Framework agreements.

The Tender Management Facility should provide a means of transferring information between awarding authorities (buyers) and suppliers as part of the tender process. Other functions to be supported by the Tender Management Facility are:

- Provide standard templates and paragraphs to be included in tender documents;
- Maintain log of suppliers who have downloaded documents;
- Provide clarification forum facility to enable tenderers to submit queries and to enable the contracting authority to publish responses to these queries;
- Facilitate the payment of tender documentation fees;
- Publish information in relation to the award of all tenders.

The electronic tender documents should contain electronic response templates that provide on-line validation to ensure the completeness of tenderers responses. Tenderers should be able to electronically submit completed tender responses in a manner that ensures:

- No loss or modification of information;
- No access to the information in advance of the tender closing date / time;
- Full audit trail of file movements showing when tenders are issued, received and opened;

**eTender Management Components**

The following diagram highlights the key functional areas and the interaction with awarding authorities and suppliers (depicted by the dashed lines).

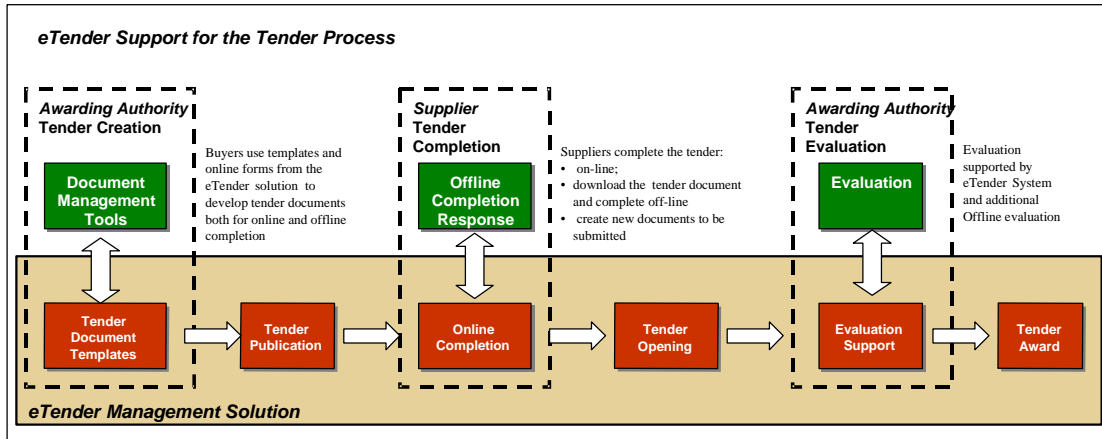


Figure 14: Functional elements of an eTender Management Facility

**Integration with other Components**

The eTender Management Solution should be closely integrated with other components of the eProcurement Technology Framework and other external systems. The diagram presented below provides an overview of some potential integration points.

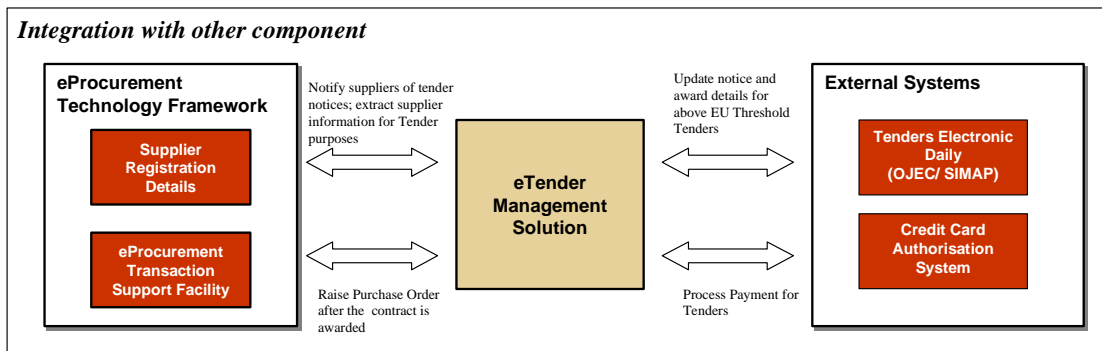


Figure 15: Integration Options for eTender Management Solution

The existing Con-Val and Con-Doc systems developed by the local authorities sector should be taken into consideration in the development of a national tender management solution.



### 5.3.7 eProcurement Transaction Support and Catalogue Management

The eProcurement Transaction Support and Catalogue Management Facility will provide buyers and users with the following support:

- Access to the appropriate catalogues;
- Search for, and identification of, items which could meet buyers’ requirements;
- Determining the prices available;
- Selecting from a choice of options;
- Placing an order for the items required;
- Providing delivery instructions;
- Electronic transmission of the order details for authorisation and approval to the appropriate authorisers;
- On approval, transmission of the order to the supplier (via email, fax, integration to supplier’s sales order system);
- Transmission of the order (real time or in batch mode) to the buyer’s own Procurement and / or Financial Management system;
- Updating of the Management Information System to reflect the detail of the transaction.

The facility is comprised of two key components,

- eProcurement Transaction Support
- Catalogue Management.

There are a number of possible implementation models to support the agencies’ requirements and the functionality highlighted above. A brief summary of the models is presented below:

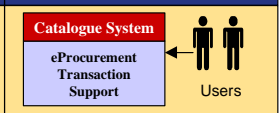
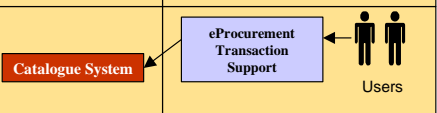
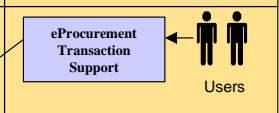
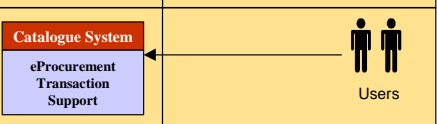

Model	Other Organisation (Shared or Outsourced)	Buying Organisation (Agency)	Description	When is it most applicable?
1			All eProcurement facilities implemented and managed locally	<ul style="list-style-type: none"> <li>• Inventory purchases</li> <li>• Specialised procurement for an agency</li> <li>• Catalogue facilities available locally with functionality to load shared catalogues</li> </ul>
2			Agencies use existing eProcurement systems and punch out to catalogues services that host shared and/or local catalogues	<ul style="list-style-type: none"> <li>• Agencies with existing eProcurement Transaction Support systems but want to access shared catalogues or outsource their catalogue management through a separate catalogue management service</li> </ul>
3			Agencies use shared eProcurement Transaction Support Facilities and Catalogue Management Services	<ul style="list-style-type: none"> <li>• Agencies do not have eProcurement Transaction Support Facilities locally to support catalogue procurement and requisitioning</li> </ul>

Figure 16: Transaction Support & Catalogue Management

Analysis of the current systems infrastructure within the public sector would suggest that each of the three models outlined above will need to be supported.

In addition to the facilities outlined above, it is possible that there will be a requirement for specialist eProcurement transaction support facility to support the needs of specific categories of procurement that have unique requirements (e.g. printing). In these scenarios it is recommended that such solutions are procured at the level (i.e. national, sector, agency) at which categories are managed.

### *Catalogue Management*

Preferred implementation models and catalogue standards should be developed at national level to facilitate the implementation of Catalogue Management systems.

This framework should address the following:

- Provide common catalogue standards to allow suppliers deliver catalogues in a common format when they are dealing across sectors;
- Provide a means for sectors and agencies to share catalogues and search across catalogues;
- The manner in which access should be provided to shared catalogue management services.

### *eProcurement Transaction Support*

Individual sectors should assess their sub-sector and agency requirements and where appropriate provide shared eProcurement Transaction Support and/or Catalogue Management facilities to the sub-sectors and agencies.

It is recommended that these systems be provided at sector or agency level because:

- The majority of contracts will reside at these levels;
- Sectors, sub-sectors and agencies would be better placed to manage the linkages needed to local financial management systems.

Sectors should leverage experience gained from pilot implementations and other sector and sub-sector implementations when planning and implementing transaction support and catalogue management facilities.

### *eMarketplaces*

As outlined within the Procurement Practices Recommendations for change, under the existing EU Directives, eMarketplaces cannot be used for the sourcing and selection of suppliers for above EU Threshold procurement. However in evaluating possible solutions in the eProcurement transaction support area, consideration should be given to leveraging existing eMarketplaces to provide support for the electronic ordering of goods and services for existing contracts and/or framework agreements. The use of eMarketplaces in these instances could reduce the need to invest in eProcurement Transaction Support and catalogue management facilities that would be delivered solely for the purpose of the sector or agency contract(s).

### *Electronic Payment*

The electronic payment facilities of the Public Sector Broker being developed by Reach should be used for eProcurement systems.

In order to enable supplier payments to be made by electronic means, it will be necessary to have the required framework and infrastructure. This should be developed in conjunction with the Reach initiative to ensure consistency of standards and approach.

### 5.3.8 Management Information Systems

The implementation and roll-out of MIS across the public sector should be managed at national level through the development of national standards.

Management Information will be critical to support a number of the Procurement Practices and Practices recommended, as well as measure success against the strategic objectives and key performance indicators identified in Chapters 4 & 6.

The management information required to support procurement can be categorised into strategic, management and operational. The diagram below illustrates the broad categories of MIS required and examples of the reports.

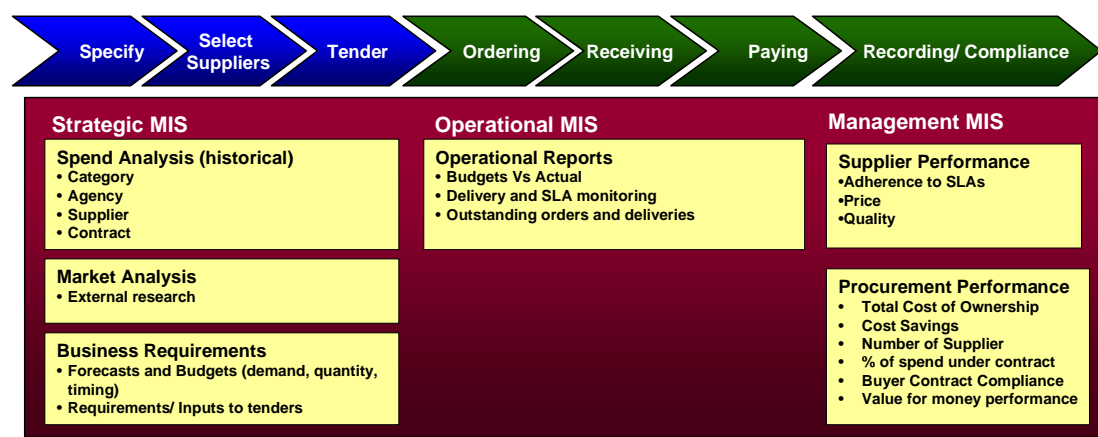


Figure 17: Categories of Management Information

The recommended framework should incorporate the:

- Identification and development of metrics for each category of management information (i.e. to measure progress against the Key Performance Indicators, to support spend analysis, to measure Procurement Performance and to measure Supplier Performance);
- Development of the reporting processes and templates to be implemented at national, sector, sub-sector and agency level to support the metrics;
- Identification of specific data that must be provided by agencies, sub-sectors and sectors.

### 5.3.9 Security

The security infrastructure provided as part of the Public Services Broker (PSB) and any associated Trusted Third Party should be leveraged to provide the security infrastructure required for eProcurement.

In order to encourage buyers and suppliers to engage in eProcurement it is critical that both parties have confidence in the underlying security infrastructure.

There are a number of factors influencing the security infrastructure required to support the eProcurement initiative including:

- Above EU Threshold, the Tender Management solution will have to meet the functional requirements set out in Annex X of the proposed EU Directives (See Appendix I);
- Buyer and supplier access to systems via the Internet and intranet requires robust **authentication as well as authorisation functionality**. Based on the identification and authorisation of the user, the services available will be personalised to the users' profile;
- 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 system to mitigate against and detect unauthorised intrusion;
- The security infrastructure for below EU Threshold tenders should be **chosen on a case by case basis** with reference to the preference of the awarding authorities, value of the tender and requirements of the supplier base;

The security infrastructure provided by the PSB under the Reach initiative should be utilised to provide:

- Buyer and supplier authentication to access components of the eProcurement Technology Framework;
- A PKI infrastructure as a means of authenticating suppliers including the provision of the following services;
  - Registration Authority to validate and verify identity of domestic and international suppliers for the purpose of digital certificates;
  - The issuing and management of digital certificates;
  - Accreditation standards and accredited Certification Authorities of other PKI infrastructures to promote interoperability;
  - PKI technology standards that eProcurement components must comply with to ensure they can be PKI "enabled".

### 5.3.10 Technology Standards Framework

#### *Standards Setting and Management*

*An eProcurement Standards Working Group should be established under the National Operations Unit*

The purpose of this working group should be to:

- Take the lead role in developing and maintaining an eProcurement Standards Framework;
- Manage co-ordination with other relevant government initiatives and international standards bodies;
- Monitor compliance with the recommended standards framework;

It is important that all standards incorporated into the eProcurement Standards Framework are accepted by all stakeholders engaged in public sector eProcurement. All key stakeholder groups should therefore be involved in the definition and maintenance of the framework.

A working group focussed on setting standards is critical in order to facilitate interoperability between national, sector and agency systems and to support document exchange and integration between buyers and suppliers. The eProcurement working group should focus on the development of Data Exchange Standards and Catalogue Format Standards. The development and adoption of other standards, for example security and interconnectivity, should be co-ordinated with other eGovernment standard bodies.

While the eProcurement Standards Framework will be defined at a national level in accordance with other eGovernment standards and with input from all relevant parties, the task of implementing these standards will to a large extent fall to the individual agencies within the public sector.

#### *Data Exchange Standards*

The successful introduction and adoption of eProcurement in the public sector will be dependent in part on the ease with which procurement related data can be exchanged both within the public sector and between the public sector and its supply base.

*In line with other eGovernment initiatives, XML should be promoted as the document exchange standard.*

XML standards for data exchange such as ebXML should be assessed as to their suitability to be adopted for eProcurement purposes.

### *Catalogue Format Standards*

The use of electronic catalogues to support the sourcing and ordering of goods and services will be an important element of the implementation of the eProcurement initiative. Catalogue Format Standards are the means by which catalogues/content is exchanged, structured and displayed.

Catalogue standards should be based on XML schemas defined as part of the Data Exchange Standards.

The development of XML schema should incorporate the catalogue formats required. The selection of any catalogue management vendor or service provider should be assessed as to their ability to accept and output data to the selected standard.

#### **5.3.11 Integration Principles**

The level of integration refers to the extent to which the solutions within the eProcurement Technology Framework are integrated. It is necessary that purchase transactions carried out through electronic ordering transaction support systems are reflected in agencies' Financial Management Systems (FMS) and are communicated to suppliers for fulfilment.

The diagram below identifies three possible levels of integration for both buyers and suppliers

<i>Level 1 – Manual Integration</i>	No direct electronic links between any of the applications. In this scenario, buying agencies would have to manually update the FMS to record purchases made (perhaps at a summary level) and to facilitate payments. Suppliers would receive orders via fax or email.
<i>Level 2 - Batch Integration</i>	Batch file transfer based electronic links between the eProcurement Transaction Support Facilities and the systems of the buyers / suppliers. In this scenario, the information is being transferred from the eProcurement facility to the FMS on a scheduled basis (e.g. daily, weekly, monthly) and orders are being provided to the suppliers on a scheduled basis also.
<i>Level 3- Real Time Integration</i>	The third level is real time integration between the central eProcurement Application and the buyer/ supplier systems. This can be provided in two manners: <ul style="list-style-type: none"> <li>• Through eProcurement Transaction Support being provided by agencies' FMS systems</li> <li>• Through real-time transfer of information from the eProcurement Transaction Support facility and the FMS.</li> </ul>

Table 5: Levels of Integration

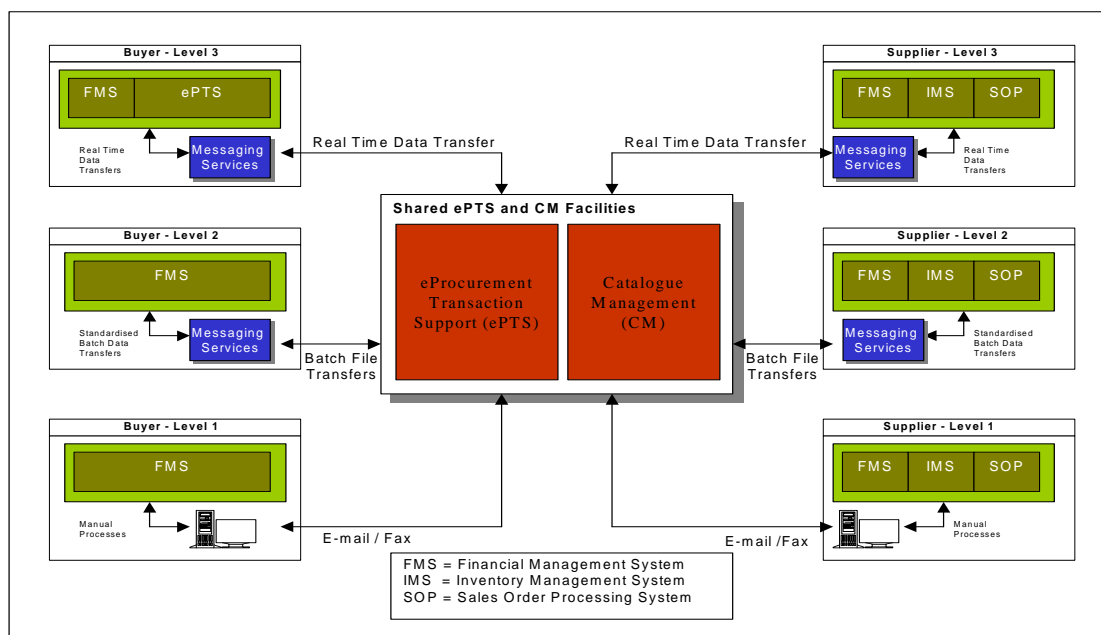


Figure 18: Levels of Integration

The level of integration required should take the following factors into consideration:

- The good or service being supported by any shared eProcurement Transaction Support and Content Management facility, reflecting the importance of the good or service to business continuity and to the management of procurement and inventory;
- The requirement of agencies to have real-time information in their FMS systems for inventory or budgeting reasons;
- The requirement for line item information in the FMS systems versus summarised journal entries (i.e. it may be sufficient to record summary information in relation to certain goods such as stationery while storing line item records of inventory goods);
- The deployment of the eProcurement Transaction Support facility to support the requisition to cheque process versus the use of the FMS system;
- Cost effectiveness of integrating an eProcurement Transaction Support facility with the FMS systems.

The solutions provided should accommodate differing levels of integration and the level to be implemented should be determined on a case by case basis.

### 5.3.12 Solution Principles

#### Focus on End-to-End Managed Services

Where economically beneficial, the systems and support services recommended in this report should be provided on a managed service basis.

The national and sectoral organisation structures proposed have not been designed to be of sufficient scale to carry out the design, construction and operation of the systems contained in the eProcurement technology framework. Therefore, the procurement agencies should seek to select vendors who will provide complete managed solutions with defined Service Level Agreements (SLAs) for the performance of the service.

The service procured should, where possible, provide the following three levels of service:

- Provide and manage applications and operational processes including help desk support and application configuration and upgrades;
- Monitor and manage connectivity, infrastructure and operations processes;
- Provide storage, connectivity and infrastructure hosting.

#### Buy versus Build

Packaged software solutions are recommended in preference to custom development, where appropriate.

Packages exist which can support the major components of the eProcurement technology framework. However, the suitability of packaged solutions may be impacted by the uniqueness of public sector requirements, particularly in relation to tender management, which is heavily influenced by regulatory requirements.



## 5.4 Recommendations for Change - Economic

### 5.4.1 National Policy/ Strategy Formulation

The National Operations Unit should keep abreast of major developments in the profile and eCommerce readiness of the existing supply base and be in a position to advise on the likely impact of eProcurement and category management strategies on the supply base.

The National Operations Unit (NOU) should maintain an understanding of the profile and eCommerce readiness of the existing supply base, as well as the nature/ potency of existing barriers to public procurement market access for different categories of supplier. This expertise should be offered by the Procurement Support Unit of the NOU as an advisory service to the wider public sector in the formulation of procurement strategies and rigorously applied in reviewing procurement strategies at sectoral and agency levels to allow for an assessment of the likely impact of changes proposed on the existing supply base.

The Procurement Support Unit of the National Operations Unit should be a national repository of learning on the nature and effectiveness of initiatives aimed at minimising the negative enterprise effects of the introduction of eProcurement/ private sector procurement practices into highly decentralised public sector markets. Potential initiatives in this regard might include the aggregation of demand for a given category of good or service to the regional as opposed to the national level, the posting of all invitations to tender on the government tenders website and/ or the introduction of a policy of including at least one SME in the supplier listings for below-threshold restricted tenders. Evidence collated from the experiences of public sector buyers and suppliers should be evaluated and disseminated as appropriate to procurement practitioners.

The National Procurement Advisory Board should have regard to the views of enterprise representative bodies.

All category management strategies which envisage significant change to existing procurement approaches should be advised by research aimed at determining the enterprise impacts of proposed changes to existing practices, policies and processes. Based on this research and baseline data collated for sectoral/ national procurement performance management systems, statements of category management strategy should incorporate, at the minimum, a profile of the existing supply base, a description of changes to existing procurement practices/ policies/ processes, an assessment of the new requirements that such changes place on existing suppliers and a description of measures/ initiatives undertaken to ensure continued market access for the greatest number of incumbent suppliers.

### 5.4.2 Enterprise Supports / Communications Strategy

The National Operations Unit should develop a mechanism for keeping suppliers informed of changes in procurement policies, practices and processes, as well as the introduction of new services such as the supplier registration system.

The National Operations Unit should have responsibility for keeping the enterprise sector informed of supply opportunities and requirements/ procedures associated with such opportunities, as well as public sector wide changes to procurement practices, e.g.

introduction of a single supplier register. This requirement may be met to some extent passively, for example via the proposed national website or the stimulation of general publicity about the initiative. However, the approach taken should also incorporate a more proactive element guided by the preparation of a national enterprise communications strategy. This could include activities such as the dissemination of information via the distribution networks and websites of enterprise representative bodies, the hosting of national and regional seminars (independently or in conjunction with enterprise representative bodies), the piggy-backing of the many eCommerce awareness initiatives being undertaken by a plethora of bodies at the present time and forecast to run into the foreseeable future, or a requirement that all state-funded eCommerce awareness campaigns have regard to the eProcurement initiative in the public sector. Experience from the communications strategy put in place to promote the existing government tenders website should be applied to determine the most appropriate approach to this exercise.

NOU activity in this regard will be eProcurement specific and designed to complement the more mainstream eCommerce capability raising activities of dedicated enterprise support agencies and bodies. The effectiveness of these agencies/ bodies in promoting eCommerce capability will be crucial to the overall success of the introduction of eProcurement into the Irish public service

#### **5.4.3 Performance Indicator System/ Monitoring**

The national and sectoral procurement performance indicator system should incorporate data on the size, location and ownership of enterprises registering and tendering for public procurement business as well as for those awarded contracts. This information should also be used as a basis to track the impacts of the introduction of eProcurement on the supply base.

National and sectoral-level procurement performance indicator systems should incorporate data on the size, location and ownership status of enterprises registered and tendering for public procurement business, and similar information on the profile of enterprises that are awarded contracts. The scope of the data should be limited to information necessary to carry out category management and performance evaluation, whether at national, sector or agency level and should be determined in consultation and agreement with the participating agencies. This would require that the supplier registration process and/ or tender documentation incorporate the provision of information in relation to each of these indicators. To the extent that it is possible, data should be tracked relative to base year findings to determine the extent to which the single supplier register is reaching all categories of supplier as well as to determine the enterprise impacts of changed procurement practices.

The foregoing exercise should be supplemented by a “cohort analysis” of suppliers to the public service to allow for the tracking of the impacts of the introduction of eProcurement on the eCommerce readiness of the supply base at the time of its introduction, as well as to determine the “survival” rates of selected supplier categories. With regard to the former, and reflecting the fact that the stimulation of eCommerce among suppliers to the public sector is one of the procurement performance objectives of the eProcurement initiative, base line data should be incorporated into the national indicator system and targets should be set.

## 5.5 Recommendations for Change - Legal

### 5.5.1 *Transposition of Amendments to EU Directives<sup>2,11</sup>*

In order to facilitate the change to eTendering, there is a need for early transposition of the currently proposed amendments to the EU public procurement directives, once adopted.

### 5.5.2 *Submission to EU Commission on eProcurement*

The Commission will be issuing a communication on the use of emerging eCommerce practices in public procurement by the end of 2001. It has requested that in advance of this, the Irish government make submissions to it in relation to eProcurement in general and, in particular the merit of permitting the use within the public sector of the types of eProcurement practices that are being used in the private sector.

The Irish Government should take up the invitation from the EU Commission to make a submission in relation to eProcurement and the merit of permitting the use within the public sector of the types of eProcurement practices that are being used in the private sector, and that it consults with the utilities sector in formulating its submission.

### 5.5.3 *Review of Agencies' Statutory Basis*

In preparation for the introduction of eProcurement, agencies should, on an individual basis, carry out an audit of the legal documents under which they were established and operate (including, where applicable, their statutory basis) to ensure that these do not contain any barriers to the transition to eProcurement and, if potential barriers are identified, they should seek to have them removed.

### 5.5.4 *Reverse Auctions*

It is understood that other Member States may seek to amend the wording of the proposed amendments to the public sector procurement Directives to allow for the use of reverse auctions, both generally and in the case of framework contracts (i.e. the individual contracts awarded under a framework agreement).

The Irish Government should consider support for any amendments proposed by other Member States or by the EU Commission in favour of permitting the use of reverse auctions or table such an amendment itself.

### **5.5.5 Electronic Signatures Directive<sup>12</sup>**

The Irish Government, through the participation of the National Accreditation Board in the European Electronic Signature Standardisation Initiative, should seek to accelerate progress on the development of standards relating to the definitions set out in the Electronic Signatures Directive, so as to ensure the effective operation of the free movement and mutual recognition principles set out in that Directive.

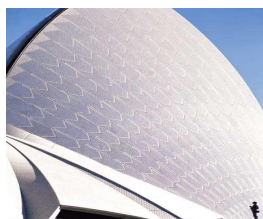
The Irish Government should also ensure through the European Commission that the adoption and publication of standards for electronic signature products, by means of the procedure set out in the Directive, should be prompt and responsive to facilitate implementation and mutual recognition of products within the EU.

### **5.5.6 Maximising Competition in the Market**

Purchasing practices should be designed having regard, at all times, to the need to maximise competition in the market and to discourage anti-competitive practices.

### **5.5.7 Transmission and Receipt of Electronic Communications**

In the terms and conditions of use of any eProcurement facility set up, and in the tender documents relating to specific procurements, clear rules should be laid down in relation to the transmission and receipt of electronic communications, and procedures should be put in place to deal with all reasonable contingencies.



## 6 Costs, Benefits and Funding

This section outlines the costs and benefits associated with the introduction of the key recommendations for change, along with recommendations on funding for the initiatives proposed.

### 6.1 Costs

Set out in Chapter 7 (The Way Forward) are descriptions of the national initiatives recommended, including the setting up of organisational structures, the implementation of systems, pilot projects, and strategic studies.

A summary of the projected costs of these initiatives over the period 2001 - 2007 is as follows:

Year	Total Estimated Cost (EUR '000s)	Total Identified Capital Costs (EUR '000s)	Total Identified Operating Costs (EUR '000s)
FY2001	38	38	0
FY2002	8,895	6,791	2,104
FY2003	11,648	6,556	5,092
FY2004	6,667		6,667
FY2005	6,752		6,752
FY2006	6,837		6,837
FY2007	6,837		6,837
Total	47,674	13,385	34,289

Figure 19: Summary of Projected Costs<sup>2</sup>

In addition to the national initiatives recommended, it is envisaged that each sector will prepare a sectoral eProcurement strategy in which it will set out its own programme of initiatives to implement the eProcurement strategy. It is not possible at this stage to accurately cost the full range of initiatives that may be implemented at sector and agency level over the period of the strategy. These costs will depend on many factors, but primarily on the rate at which agencies and sectors can adapt to the new procurement framework. It

<sup>2</sup> The Dept. of Finance circular "Costing of Civil Service Staff Time" (1996) was used in the calculation of these costs

must be recognised, also, that in implementing some of the initiatives, it is likely that increased costs will be incurred over the transition period due to the need for running old and new approaches in parallel.

Cost estimates will be prepared by the sectors in developing their sector eProcurement strategies and it is likely, that the overall costs of implementing the national strategy will be significantly greater than the costs of the national initiatives alone.

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 2007;
- 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.

## 6.2 Benefits

### 6.2.1 Strategic Objectives and Targets

The financial and non-financial benefits envisaged from the implementation of the strategy are reflected in the strategic objectives proposed in Chapter 4 (Strategic Objectives). Targets and key performance indicators are recommended for each objective, and these are summarised in the table below. The spend-related percentage targets are set with reference to the budgeted / forecasted out-turn for FY2001.

Objective	Key Performance Indicator	Target
A) To improve service levels to buyers, suppliers and users involved in public sector procurement	User, Supplier and Buyer Satisfaction Levels	Set following completion of baseline survey.
B) To develop a more integrated approach to procurement across public sector agencies and sectors	Percentage of National Expenditure on Supplies and Services and selected works (repairs and maintenance) procured under cross-agency contract	25% of expenditure on supplies and services and works (repairs and maintenance) procured under cross-agency contracts by end Y5 (2007)
C) 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	Average Cost per Transaction for supplies, services and works (repairs and maintenance)  Transaction Cost for capital works	20% reduction in average transaction costs by end Y5 (2007)  25% of expenditure impacted by end Y5 (2007)  Reduction in transaction cost equal to 0.25% of total capital works expenditure by end Y5 (2007)
D) To maximise value for money for Irish public sector expenditure by enhancing the buying power of the public sector	Percentage of National Expenditure on Supplies and Services and works (repairs and maintenance) procured under contract  Unit Cost Reduction for Supplies and Services and Works (repairs and maintenance)  Fee levels for tender management and contract supervision and administration for capital works	50% of expenditure on supplies and services and works (repairs and maintenance) procured under contracts by end Y5 (2007)  Average Unit Cost Reduction of 5% for supplies services and works (repair and maintenance) by end Y5 (2007)  Reduction of 0.5% of total capital works expenditure by end Y5 (2007)
E) To promote competition among suppliers while maintaining reliable sources of supply	User, and Buyer Satisfaction Levels  Percentage of Tender and Award notices Published Electronically  Unit Cost Reduction	Set following completion of baseline  80% by end of Y2 (2004)  Average Unit Cost Reduction of 5% by end Y5 (2007)

Objective	Key Performance Indicator	Target
F) To optimise inventory levels through the adoption of efficient procurement practices	Addressed as part of category management strategies	
G) To make effective use of human resources in the procurement process	Average Cost per Transaction for supplies, services and works (repairs and maintenance)  Transaction Cost for capital works	20% reduction in average transaction costs by end Y5 (2007)  25% of expenditure impacted by end Y5 (2007)  Reduction in transaction cost equal to 0.25% of total capital works expenditure by end Y5 (2007)
H) To promote the use of eCommerce in the wider economy	Track movements in eCommerce adopting levels in public sector supply base relative to adoption levels in wider enterprise sector	Set following completion of baseline
I) To improve the auditability of public procurement expenditures	No national targets set	
J) To be progressive in the adoption of procurement related Information and Communication Technologies (ICT)	Percentage of Tender Competitions carried out electronically  Percentage of Tenders and award notices advertised and tender documentation published electronically  Percentage of Expenditure on Supplies and Services supported by electronic catalogue and ordering facilities  Percentage of Payments transacted Electronically	90% of Tenders above EU Threshold by end of Y4 (2006)  80% by end of Y2 (2004)  10% of expenditure on supplies and services by end Y5 (2007)  80% by end Y5 (2007)

Table 6: Objectives, Targets and Key Performance Indicators

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. A description of the basis and rationale for selecting these targets, along with the proposed approach to measuring performance against targets, is set out at Appendix B.

## 6.2.2 Quantifying the Financial Benefits

The level of financial benefits achievable is based partly on the estimated percentage of overall public sector procurement expenditure, which could be saved as a result of the implementation of the eProcurement strategy. For FY2001 the total national expenditure on procurement in the public sector (excluding the commercial state sector) is projected to be approximately EUR 8.8bn. This has been established with reference to Votes & Estimates (2001) and local authority accounts (1999), producing the following figures for the 2000 and 2001 financial years:



	Central Government EUR'000	Education EUR'000	Health EUR'000	Local Authorities EUR'000	TOTAL EUR'000
<b>FY2000</b>					
Gross	10,720,471	4,233,911	5,656,038	3,916,854	24,527,274
Less: Pay	2,643,833	2,661,591	3,281,270	1,202,372	9,789,066
Less: Deductions	5,907,957	238,480	840,403	294,155	7,280,994
Less: Mail / Travel	165,000				165,000
<b>Procured</b>	<b>2,003,681</b>	<b>1,333,841</b>	<b>1,534,365</b>	<b>2,420,326</b>	<b>7,292,214</b>
Being: Works	831,391	512,598	293,944	1,706,331	3,344,265
Supplies & Services	1,172,289	821,242	1,240,421	713,995	3,947,948
<b>FY2001</b>					
Gross	12,874,017	4,716,285	6,851,039	4,781,316	29,222,656
Less: Pay	3,017,413	3,043,504	3,995,753	1,361,017	11,417,687
Less: Deductions	7,226,410	263,667	945,889	338,456	8,774,422
Less: Mail / Travel	183,000				183,000
<b>Procured</b>	<b>2,447,194</b>	<b>1,409,114</b>	<b>1,909,398</b>	<b>3,081,842</b>	<b>8,847,547</b>
Being: Works	1,003,606	498,458	343,845	2,271,088	4,116,997
Supplies & Services	1,443,587	910,656	1,565,553	810,754	4,730,550

Table 7: Spend Estimates

Education, Health and Local Authority figures incorporate their respective Government Department spend figures. Due to the significant increase of predicted spend in FY2001 over FY2000, therefore it is prudent to base predicted financial benefits upon the budgeted / forecast out-turn for FY2001:

Supplies & Services EUR 4.731 billion  
Works EUR 4.117 billion

#### 6.2.2.1 Basis of Calculation of Financial Benefits

The financial benefits projected, can be summarised under two 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.

The following table summarises the targets in relation to each of these, taking into account the level of reduction proposed as well as the proportion of expenditure impacted.

	Supplies and Services	Works (Repair & Maintenance)	Capital Works
Unit Cost Reduction	2.5% of Total Expenditure	2.5% of Total Expenditure	0.5% of Total Expenditure
Transaction Cost Reduction	5% of Total Transaction Costs	5% of Total Transaction Costs	0.25% of Total Expenditure

Table 8: Savings Targets

Reductions in capital costs arising from increased automation and standardisation of suppliers' procurement transaction processes have not been included although the potential for such savings will arise as the eProcurement capability of suppliers increases over time.

### 6.2.2.2 Timing of Benefits

Assumptions about the timing in the delivery of cost reductions are crucial in quantifying the financial benefits. Because 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 little significant benefits emerging in the earlier part of the period

### 6.2.2.3 Financial Benefits Estimates

The following table summarises the assessment of potential financial benefits over a five-year period (assuming that FY2002 is year zero for investment purposes). All costs are at FY2001 levels.

	← Year →						Cumulative
	0	1	2	3	4	5	
	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	EUR'mill
	EUR'mill	EUR'mill	EUR'mill	EUR'mill	EUR'mill	EUR'mill	EUR'mill
Procured Supplies & Services	4,914	4,914	4,914	4,914	4,914	4,914	4,914
LESS:Travel / Post	183	183	183	183	183	183	183
Net Supplies & Services	4,731	4,731	4,731	4,731	4,731	4,731	4,731
Works (Repairs & Maintenance)	906	906	906	906	906	906	906
Works (Capital)	3,211	3,211	3,211	3,211	3,211	3,211	3,211
Total	8,848	8,848	8,848	8,848	8,848	8,848	8,848
<b>Cumulative Impacted %age</b>	<b>0</b>	<b>7</b>	<b>20</b>	<b>40</b>	<b>67</b>	<b>100</b>	
Impacted Costbase	0	590	1,770	3,539	5,899	8,848	
<u>Procured Supplies &amp; Services</u>							
Unit Cost Related Benefit	0	8	24	47	79	118	276
Transaction Cost Related Benefit	0	1	2	4	7	10	24
<u>Works (Repairs &amp; Maintenance)</u>							
Unit Cost Related Benefit	0	2	5	9	15	23	54
Transaction Cost Related Benefit	0	0	0	1	1	2	4
<u>Works (Capital)</u>							
Unit Cost Related Benefit	0	1	3	6	11	16	37
Transaction Cost Related Benefit	0	1	2	3	5	8	19
<u>Total</u>							
Unit Cost Related Benefit	0	11	32	62	105	157	367
Transaction Cost Related Benefit	0	2	4	8	13	20	47
<b>Total saving</b>	<b>0</b>	<b>13</b>	<b>36</b>	<b>70</b>	<b>118</b>	<b>177</b>	<b>414</b>

Table 9: Assessment of Potential Financial Benefits

\* To reflect this, we have used the sum of digits approach to estimate a pattern of exponential increases cost reductions delivered (see figure 19 below). This is an approach to depreciation used to reflect loss of value early in asset lifetime. In this instance we are using the method in reverse, to reflect benefit delivery later in the lifetime of the initiatives

Recurring annual benefits are EUR 177 million at, and beyond, FY2007 (year five), building up incrementally from FY2002\*. This represents approximately 2% of annual (in scope) procurement expenditure. The potential cumulative benefit over the reference period (FY 2002 – FY2007) is estimated to be EUR 414 million.

The in-year and cumulative delivery of savings is depicted in the graph below:

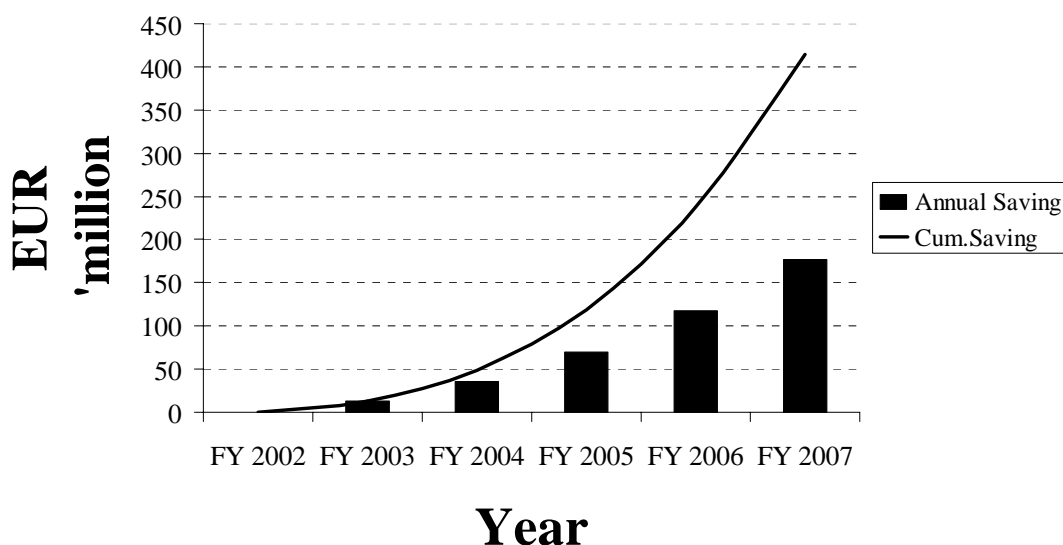


Figure 20: Delivery of Savings

### 6.3 Determining the Level of Funding

To determine the level of investment, which could be justified based on the targeted savings being achieved, an approach based on discounting the potential future financial benefits has been adopted.

A high discount rate (20%) was chosen because of:

- The relative risk attached to the delivery of savings;
- The elapsed time before the bulk of savings is potentially delivered (i.e. in our workings, 60% of savings are delivered during years four and five – FY2006/2007).

In view of the back-loaded nature of benefits, it is necessary to link investment with potential savings delivered, and provide it in two separate tranches:

	← Year →						Cumulative
	0	1	2	3	4	5	
	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	
	EUR'mill	EUR'mill	EUR'mill	EUR'mill	EUR'mill	EUR'mill	EUR'mill
<b>Total saving</b>	<b>0</b>	<b>13</b>	<b>36</b>	<b>70</b>	<b>118</b>	<b>177</b>	<b>414</b>
<b>NPV: Discounted @20%</b>	<b>0</b>	<b>11</b>	<b>25</b>	<b>41</b>	<b>57</b>	<b>71</b>	<b>204</b>
LESS: Investment - Tranche 1	14	14	14				43
<b>NPV - post Tranche 1</b>	<b>-14</b>	<b>-1</b>	<b>15</b>				<b>0</b>

NB – Given the NPV(Net Present Value) of the year two cumulative saving equalling EUR 40 million (i.e. EUR 12 million plus EUR 28 million), the maximum investment that would deliver an IRR=20% (i.e. a cumulative NPV=0) is derived as the total investment (divided into three equal parts) that has an NPV of EUR 40 million at a discount rate of 20%. Hence the NPV of saving less investment equals zero.

Table 10: Timing of Investment

The first investment tranche covers years zero to two (FY 2002 – 04) – **up to EUR 43 million** could be invested evenly over the period to deliver the cumulative savings envisaged (EUR 13 million plus EUR 36 million = EUR 49 million). This would deliver a zero NPV (Net Present Value) at year two – indicating an Internal Rate of Return (IRR) of 20%.

Any effort to rigorously derive the level of investment required for the second tranche (FY2005 – FY2007) 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 years zero to two would be likely to provide an IRR greater than 20%, and it is likely that significantly greater levels of investment could be justified at that stage. 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 – 2007, based on projected financial benefits only, is

- EUR 43 million in the years 2002 – 2004
- A minimum of an additional EUR 43 million in the years 2005 – 2007

The above projections have not taken account of non-financial benefits because these cannot readily be quantified. However, it is recognised that a higher level of investment may be justified to reflect a value derived from non-financial benefits.

### 6.3.1 Review of Second Tranche Funding

A review should be undertaken during 2004 to consider the amount of second tranche investment required to deliver the substantial longer-term savings. The outcome may be an increase or a decrease on the levels proposed in this report, and should be based on several criteria:

- Requisite measurement systems are in place in order to confirm the accuracy of numbers;
- Confirmation that the EUR 13 million savings in FY2003 have been delivered;
- Firm commitment is made (and plans in place) to deliver the EUR 36 million saving in FY2004;
- Confirmation that later year (FY2005 – FY2007) savings assumptions are realistic and achievable;
- First tranche investment spending is neither overspent nor forecast to be.

The back-loaded nature of savings delivery, and the relatively low savings generated up to FY2004, gives rise to the risk of any slippage in delivery being countenanced (in view of the sizeable benefits in later years). The dangers of early slippage potentially derailing achievement of late-stage savings (in terms of either under-shooting targets and/ or shifting achievement of the recurrent EUR 177 million annual saving beyond FY2007) cannot be emphasised enough. To this end, it is suggested that a stretch-target of achievement of FY2004 savings by FY2003 be considered – producing a potential buffer (and recognising the likelihood of delivery of quick-wins early in the timetable).

## 6.4 Sensitivity Analysis

It is worth analysing the impact of different sets of assumptions regarding potential financial benefits achievable.

The key area for sensitivity analysis is the percentage used to calculate unit cost savings in relation to Procured Supplies & Services (as this represents two-thirds of total savings generated).

For every 0.1% change in unit cost savings (relating to Procured Supplies & Services only), the change impact on Total Savings (up to and including FY2007) is **EUR 11 million** (see graph below). For example, total savings would be roughly halved if unit cost savings in supplies and services fell from 2.5% to 0.6%:

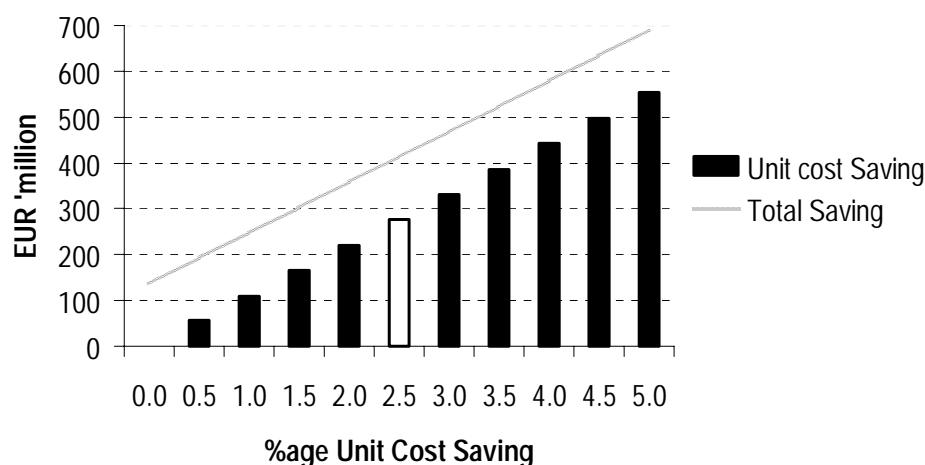


Figure 21: Relationship between unit cost savings and total savings

For every 0.1% change in unit cost savings (relating to Procured Supplies & Services only), the change impact on Total Available Tranche 1 investment (up to and including FY2004) is **EUR 1 million** (see graph overleaf).

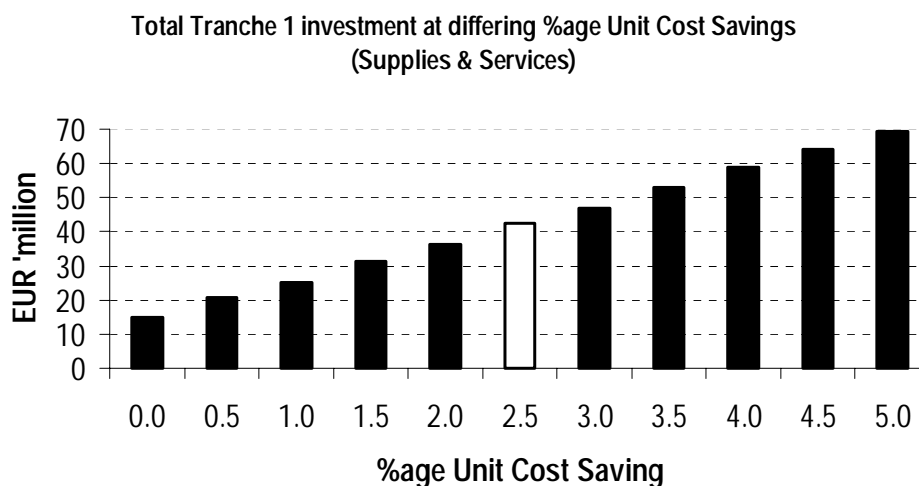


Figure 22; Relationship between unit cost savings and total available tranche 1 investment

Note – in both graphs, the white bar represents the working assumption that a 2.5% saving will be delivered.

## 6.5 Allocation of Funding

It is stressed that if the return on investment as set out in this report is to be realised within the timeframe of 2002 –2007, appropriate resources need to be put in place at all levels. Failure to do so will result in the anticipated financial returns not materialising during the implementation phase.

To facilitate good planning and to provide the necessary confidence, it is recommended that a multi-annual “envelope” approach be adopted during the annual Estimates process in relation to the funding for the procurement and eProcurement initiatives set out in this report.

This funding should be allocated annually to each sector, and to the National Operations Unit, on the basis of proposals for initiatives developed by them as part of the normal budgeting process. The National Policy Unit should approve initiatives and support appropriate budget requests included in sector budget proposals.

Individual sectors or agencies requiring initiative funding should ensure that business cases provide full quantitative and qualitative evidence of their ability to deliver benefits within stipulated timescales.

When sectoral eProcurement strategies have been completed and agreed, it will be possible to verify the adequacy of the proposed overall funding incorporated in the national strategy. In determining their required levels of investment, sectors must take existing resources into account and their ability to maximise their use in meeting the eProcurement needs of their sector. If the level of funding proves insufficient, it would be important in making any

decision about additional funding , to consider the benefits of the eProcurement investment in achieving other objectives such as modernising the public service , implementing eGovernment and improving national competitiveness.

It is recommended that, at least in the initial period, the Government should provide up to 100% of the additional capital and operating funding required for national initiatives. Access to all systems and support services should, in principle, be provided at no charge to agencies and suppliers, in order to encourage their participation. This approach should be reviewed after an initial period, and the opportunity for more creative funding approaches could be considered. This is suggested because

- Supplier and agency participation is crucial to get these initiatives off the ground
- Alternative business models which might be proposed by providers, such as reliance on revenues from web advertising, transaction charges to suppliers, and other sources have not yet been proven

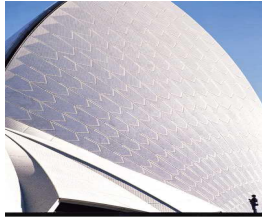
One of the alternative funding approaches for some of the major initiatives to which consideration should be given at that time is Public Private Partnership (PPP).

## 6.6 Treatment of Savings Achieved

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. 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 such services. The mechanisms for tracking procurement performance, set out in Appendix B, should be used as the basis for ensuring this.

This must, be subject to Government accounting rules and the right of Government to reduce any allocation in changing budgetary circumstances.

The National Operations Unit and Sector Procurement Units should be responsible for monitoring the procurement performance of participating agencies vis-à-vis those not participating, and for the development of strategies, including those based on budgetary policy, to encourage greater participation in procurement initiatives.



## 7 The Way Forward

The purpose of this section of the report is to outline:

- The programme of work required to implement the recommendations detailed in the previous section of the report;
- Pilot initiatives recommended and guidelines for the evaluation of other pilot initiatives;
- The immediate next steps required to begin the implementation of the strategy.

### 7.1 Recommended Work Programme

In order to implement the recommendations detailed in the previous section of the report it is recommended that a range of projects be completed.

The recommended projects are grouped under the following headings:

- Organisational Development Projects;
- eProcurement Technology Framework Projects;
- Further Studies.

The following table presents a brief description for each of the recommended projects. Detailed project charters for each of the projects are contained in Appendix G – Project Charters



Project	Description	Project Sponsor
<u>A. Organisational Development Projects:</u>		
A1: Establishment of Interim National Operations Unit	The establishment of an interim unit within the Department of Finance whose main objective is to commence the implementation of key projects in advance of setting up the NOU. The project should include the development of detailed roles, responsibilities and competency profiles for all positions within the unit and the appointment of individuals.	Dept of Finance
A2. Establishment of National Policy Unit	The establishment of a discrete national Procurement Policy Unit within the Department of Finance. This should include; <ul style="list-style-type: none"> <li>• the development of detailed roles, responsibilities and competency profiles for all positions within the unit</li> <li>• the appointment of individuals to fill these roles</li> </ul>	Dept of Finance
A3: Review of Interim Organisational Arrangements	The implementation of an independent review of the temporary organisational bodies at national, sectoral and Agency level to determine their most appropriate location in the procurement structure, based on experience gained during the initial twelve month period.	Dept. of Finance
A4. Establishment of National Operations Unit	The establishment of a National Operations Unit. This project should include <ul style="list-style-type: none"> <li>• the development of detailed roles, responsibilities and competency profiles for all positions within the unit</li> <li>• the appointment of individuals to fill these roles and</li> <li>• the physical establishment of the agency.</li> </ul>	Dept of Finance
A5. Development of National Procurement Training Plan	Key to the successful implementation of the procurement practices contained within the national strategy is the development of the skills required to implement these practices at a national, sector and agency level. In order to ensure a consistent set of skills are developed across the public sector and that all agencies and sectors have access to the means to develop these skills a National Training plan will need to be developed. The project should include the following: <ul style="list-style-type: none"> <li>• Conducting a Training Needs Analysis across the public sector to meet the requirements of the eProcurement role out</li> <li>• Development of core curriculum</li> </ul>	National Operations Unit

Project	Description	Project Sponsor
	<ul style="list-style-type: none"> <li>• Determine training delivery approaches</li> <li>• Development of Training materials</li> <li>• Piloting the delivery of the training courses contained within the curriculum</li> </ul>	
A6. Development of National Change Management Plan	<p>If procurement is to be viewed as a strategy support activity within the public sector then the current attitude to procurement will need to be changed. This will require the development, management, co-ordination and implementation of a detailed Change management plan once the strategy is approved for implementation. Key components of the Change management plan will need to be stakeholder management and communications management.</p>	National Operations Unit
A7: Establishment of Central Government Sector Procurement Unit	<p>The establishment of a Central Government Sector Procurement Unit. The project should include the development of detailed roles, responsibilities and competency profiles for all positions within the unit, the appointment of individuals and the physical establishment of the Unit. This project will take into account the potential role of the GSA.</p>	Dept of Finance
<u>B. eProcurement Technology Framework Projects:</u>		
B1 National Supplier Registration System	<p>This project is divided into three phases. Phase one of the project will focus on testing the feasibility of a National Supplier Register by working with representatives from all sectors and from the enterprise community to undertake a scoping, analysis and high level design of the National Supplier Register.</p> <p>Phase 2 of the project will cover the procurement of the solution and solution provider assuming that the outcome of the feasibility study provides the go ahead</p> <p>Phase 3 will cover activities such as completion of the design, technical architecture, system development, system testing and roll-out</p>	National Operations Unit
B2. Design National Procurement Content Management Framework	<p>To develop a framework to facilitate the implementation of a National Public Procurement website as well as sector or agency sites. The project will cover the following:</p> <ul style="list-style-type: none"> <li>• Standards and guidelines to cover areas such as content templates, technology, meta data, content design, editorial process, archiving, etc.;</li> <li>• Content classification, templates and design;</li> <li>• Authoring, editing and publishing guidelines;</li> </ul>	National Operations Unit

Project	Description	Project Sponsor
	<ul style="list-style-type: none"> <li>• Agree content sharing approaches for the different content categories;</li> <li>• Archiving and expiration guideline;</li> <li>• Search engine requirements and suitability of the Government Search Engine.</li> </ul> <p>The project should be run in close co-operation with the BASIS initiative.</p>	
<p>B3. Design National Catalogue Management Framework</p>	<p>To design and agree with sectors an implementation framework for Catalogue Management Systems. The framework should include areas such as:</p> <ul style="list-style-type: none"> <li>• Implementation models (focussing on potential to share services and information across sectors);</li> <li>• Develop Catalogue Standards;</li> <li>• Identifying goods and services most suited to Catalogue Management.</li> </ul>	<p>National Operations Unit</p>
<p>B4. Design National Procurement Management Information Framework</p>	<p>The scope of this project is provide a framework in agreement with the sectors and agencies, to implement and roll-out MIS across the public sector to support the procurement practices of:</p> <ul style="list-style-type: none"> <li>• Tracking progress of strategy against the KPIs;</li> <li>• Portfolio and category management (spend analysis);</li> <li>• Supplier performance management;</li> <li>• Procurement Performance management.</li> </ul> <p>The scope of the project should include:</p> <ul style="list-style-type: none"> <li>• Identification and development of metrics for each category of MIS;</li> <li>• Development of the reporting processes and templates for recording and communication procurement performance.</li> </ul>	<p>National Operations Unit</p>
<p>B5. National Public Procurement Website</p>	<p>Design, develop and implement National Public Procurement Website to provide Information Services to public sector buyers, the enterprise sector and the general public.</p> <p><u>Phase 1</u> The scope of Phase 1 of this project is to:</p> <ul style="list-style-type: none"> <li>• Identify the information services and web site access requirements based on the content identified as part of the Content Management Framework;</li> <li>• Develop requirements to be supported by the Content Management Tool and the ISP;</li> <li>• Select Content Management Application and implementation partner.</li> </ul>	<p>National Operations Unit</p>

Project	Description	Project Sponsor
	<p><u>Phase 2</u> Design, implement and launch the web site</p>	
<p>B6. National Tender Management Facility</p>	<p>The objective of the project is to provide an electronic tender management system to manage the publishing, completion, submission, opening and awarding of the tenders.</p> <p>Phase one of the project should focus on definition and agreement of scope, defining requirements, preparation of tender documents and selection of solution.</p> <p>Phase 2 of the project should focus on implementation of the Tender Management Solution. This will also include the implementation of the required security infrastructure.</p>	<p>National Operations Unit</p>
<p>B7. Central Government Catalogue based eProcurement System</p>	<p>The first phase of the project will specify the requirements for a Catalogue-Based eProcurement system to support users throughout all departments and agencies within Central Government and in-line with the Framework agreed at a National Level. It will also include the tendering and selection of a solution and implementation partners.</p> <p>The second phase of the project will cover the implementation of the solution for the Central Government departments in line with requirements specified in Phase 1.</p>	<p>Central Government Sector Procurement Unit</p>
<p>B8. Central Government Management Information System</p>	<p>Scope, analyse and design Management Information Systems to meet the requirements of Central Government to support their Procurement requirements based on the agreed MIS framework. Select solution and solution provider for the MIS system.</p>	<p>Central Government Sector Procurement Unit</p>
<p><u>C. Further Studies:</u></p>		
<p>C1. Develop National Classification Scheme</p>	<p>The project will identify an appropriate approach to the coding and categorisation of purchases across the public sector. This will involve the following key activities:</p> <ul style="list-style-type: none"> <li>• Assessment of the coding and categorisation approaches currently being used in the public sector;</li> <li>• Identification of the coding and categorisation requirements (e.g. spend analysis, reporting, eCatalogues);</li> </ul>	<p>National Operations Unit</p>

Project	Description	Project Sponsor
	<ul style="list-style-type: none"> <li>• Determining the level of standardisation achievable;</li> <li>• Selection of suitable coding and categorisation standards to meet requirements;</li> <li>• Developing approaches to meeting any sector variations required.</li> <li>• Development of strategy, policies and procedures to ensure effective implementation of the national approach to coding and categorisation.</li> </ul>	
<p>C2. Develop Unit Costs and Transaction Costs Baselines</p>	<p>The project will develop a baseline for two key procurement measures:</p> <ul style="list-style-type: none"> <li>• Unit cost;</li> <li>• Transaction cost.</li> </ul> <p>The approach to be adopted will be based on statistical sampling methods. For unit costs, this might be based on a 'basket of products and services' across agencies.</p> <p>The project will also develop policies and guidelines for ongoing monitoring of these measures.</p>	<p>National Operations Unit</p>
<p>C3. Revise National Procurement Policies and Guidelines</p>	<p>This project will revise the current policies and guidelines in order to incorporate the national procurement strategy. The key activities involved will be:</p> <ul style="list-style-type: none"> <li>• Reviewing existing 'Green Book' and identifying areas of change required;</li> <li>• In consultation with the NPA and the sectors, determine policies and practices to be included;</li> <li>• Develop and agree revised policies and guidelines;</li> <li>• Publish and disseminate via national Procurement Website.</li> </ul>	<p>National Policy Unit</p>
<p>C4. Establish Baseline for eCommerce Readiness of Public Sector Supply Base</p>	<p>Conduct a survey of a sample of public sector suppliers (stratified to ensure that the various supplier categories are sufficiently well represented) to determine their usage of eCommerce. This survey would form the basis of a survey to be conducted annually on the same sample to track the impact of the introduction of eProcurement on the eCommerce readiness of suppliers to the public sector.</p>	<p>National Policy Unit</p>
<p>C5. Establish Baseline for Profile of Supply to Public Sector</p>	<p>Collation of base line data on the profile of supply for public sector agencies for incorporation into sectoral procurement performance management systems and to feed up into the national procurement performance management systems.</p>	<p>National Policy Unit</p>
<p>C6. Establish Baseline for Buyer, Supplier and User Satisfaction Levels</p>	<p>In agreement with the sectors and agencies, the project will develop a baseline for supplier, user and buyer satisfaction with procurement in the public sector, so that future improvements in these qualitative aspects</p>	<p>National Policy Unit</p>

Project	Description	Project Sponsor
	of procurement performance can be assessed. This will involve the following key activities: <ul style="list-style-type: none"> <li>• Determination of criteria for assessing satisfaction;</li> <li>• Selection of participants for survey;</li> <li>• Data collection (survey, interview).</li> <li>• Collation of sector and national level data</li> <li>• Development of policies and guidelines for future assessments</li> </ul>	
C7: Prepare EU Commission Submission on B2B practices in eProcurement area	Preparation of submission to DG Internal Market of the European Commission on the use, by public sector bodies, of eProcurement practices that are emerging in the private sector (such as reverse auctions, eMarket places and supplier driven dynamic catalogues).	Department of Finance (NPU)
S1: Development of Sector Strategies for Health, Education, Central Government and Local Authorities	The development of sector strategies for eProcurement based on the national strategy.	Sector Parent Departments (Health, Education, Environment & Finance)

Table 11: Recommended Projects

## 7.2 Pilot Initiatives and Guidelines

In addition to the range of projects outlined a number of pilot initiatives at national level are also recommended. These pilots are summarised in the table below

Pilot Initiative	Description	Objectives	Sponsor
Tender Management	<p>Pilot a Tender Management Solution to support below EU Threshold tenders. The pilot project should last approximately 6 months and cover a number of different tendering processes, for example, two stage tendering (RFI and RFP) and RFP.</p> <p>The focus of the tender management solution should be on the exchange of tender documents between suppliers and buyers and the ability to use templates and forms by suppliers, to allow online completion of tenders and to assist in the evaluation process.</p>	<ul style="list-style-type: none"> <li>To assess the impact of electronic tendering on buyers and the tendering process within the pilot agencies</li> <li>To test the acceptance of electronic tendering both within the public sector buying communities and also different supplier communities</li> </ul>	National Operations Unit
Electronic ordering using electronic catalogue	<p>Implement a Catalogue Based eProcurement solution to support an existing cross-agency contract or contract than can be put in place in a timely manner. The nature of goods or services covered by the contract must be suitable for catalogue based procurement and the supplier(s) must be able to provide an electronic catalogues.</p>	<p>The objectives of this pilot are to test:</p> <ul style="list-style-type: none"> <li>The impact of decentralised buying within organisations</li> <li>User acceptance and reaction to an eCatalogue procurement</li> <li>Ability to implement one solution to support many public sector agencies</li> <li>Measure the benefits of Catalogue based eProcurement</li> <li>Assess level of integration required with back-office systems</li> </ul>	National Operations Unit

Table 12: Pilot Projects

In addition to national pilots, it is important that sectors and individual agencies undertake pilot eProcurement initiatives so that the benefit of their experience can be rapidly availed of at a national level.

It is recommended that any proposed pilots should:

- Have the approval of the relevant Sector Procurement Unit and the NPU;
- Have a clear statement of objectives, with defined success criteria and evaluation process;
- Be consistent with the national and sector eProcurement Strategies;
- Be consistent with other eGovernment initiatives – including frameworks emerging from the Reach initiative;
- Have costs that are reasonable, having regard for the scope and purpose of the pilot;
- Adopt a holistic view of eProcurement – addressing organisational, practice and process issues as well as systems;
- Not duplicate pilot initiatives taking place elsewhere.

### 7.3 Timetable and Dependencies

The Gantt Chart (on the following page) outlines a suggested sequencing for each of the recommended projects and pilot initiatives. It takes account of the interdependencies between initiatives, as well as dependencies on other eGovernment initiatives. In particular the implementation of the proposed eProcurement technology framework is dependent on the Reach initiative for the provision of

- The proposed Business Services Number which will act as an input into the Supplier Registration System;
- Security Infrastructure to support the eTender Management facility;
- Content Management Framework to act as an input into the development of the procurement content management framework.

In addition the proposed Government Virtual Private Network will be an important part of the technical infrastructure required to support the introduction of eProcurement.

It is critical that the National Policy Unit manages the co-ordination with other eGovernment initiatives and ensures that the relevant parties are aware of the eProcurement timeline and dependencies.

The National Policy Unit should review the timetable on an on-going basis.



	Pre- Requisite Projects	2001		2002												2003				
		N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M
<b>A. Organisational Development Projects :</b>																				
A1. Establishment of Interim National Operations Unit																				
A2. Establishment of National Policy Unit																				
A3. Review of Interim Organisational Arrangements	A1, A2																			
A4. Establishment of National Operations Unit	A1, A2, A3																			
A5. Development of National eProcurement Training Plan	A1																			
A6. Development of National Change Management Plan	A1																			
A7. Establishment of Central Govt Sector Procurement Unit	A1																			
<b>B. eProcurement Technology Framework Projects:</b>																				
B1 National Supplier Registration System	C1																			
- Feasibility																				
- Specification and Selection																				
- System Delivery																				
B2. Design National Content Management Framework																				
B3. Design National Catalogue Management Framework	C1																			
B4. Design National Procurement MIS Framework	A1																			
B5. National Public Procurement Website	A1, B2																			
- Specification and Selection																				
- System Delivery																				
B6. National Tender Management Facility																				
- Specification and Selection																				
- System Delivery																				
B7. Central Gov Catalogue based eProcurement System	A1, A7, B3																			
- Specification and Selection																				
- System Delivery																				
B8. Central Government Management Information System	A1, A7,B4																			
- Specification and Selection																				
- System Delivery																				



## 7.4 Immediate Actions Required

In order that key milestones in the implementation of the national eProcurement strategy are achieved, there are a number of essential early actions that should be initiated immediately upon approval of the strategy:

- The NPU should be established. Its immediate priority tasks should be:-
  - Approval of sector initiatives and facilitating the funding of sectoral eProcurement initiatives, including the development of sectoral strategies;
  - Co-ordination and Approval of sectoral strategies to ensure compliance with national strategy and integration with proposed national structures;
  - Assisting in the establishment of the interim operations unit;
  - Establishment of the National Procurement Advisory Board;
  - Co-ordinating and monitoring eProcurement activities across the sectors;
  - Investigating options and make recommendations on the establishment of the National Operations Unit
  - Investigating and making recommendations supporting the establishment of an SPU for central government
  - Preparing legislation to allow speedy transposition of the proposed amendments to EU Procurement Directives into Irish law on foot of their adoption by the European Parliament.
  - Preparing Ireland's submission to the EU Commission in relation to the implementation of eProcurement (Legal Recommendation 2)
- The interim operations unit, which will be responsible for ensuring that the early initiatives are kicked-off on schedule, should be set up. Its immediate priority tasks should be;
  - Initiate and co-ordinate the pilot projects on eTendering and eOrdering in conjunction with the selected pilot agencies
  - Initiate and co-ordinate any central government sector pilots decided upon
  - Initiate the establishment of any national infrastructure required to support pilot projects
  - Agree national and sectoral objectives for procurement performance, in consultation with the sectors
  - Establish the National Procurement Managers Forum
  - Commence the development of programmes of training standards and best practice

## 7.5 Key Risks and Assumptions

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

- There are no delays in approval of national strategy;
- Support and co-operation of the individual sectors for the national strategy is forthcoming;
- There are no delays in establishing the structures recommended in strategy (i.e.: NPU, NOU, SPU);
- Key stakeholders at the sector and national level are available to take key actions required in the Change Management plan
- Buy-in is obtained from buyers and suppliers to the system;
- A national categorisation and coding strategy is agreed on schedule;
- There is no delay in completing the National Content Framework;
- The Reach and BASIS initiatives are completed on schedule.
- Full realisation of projected savings is based on the assumption that sector led initiatives will be completed by the end of 2007

## 7.6 Key Implementation Challenges

The Strategy and associated work programme recommended in this report will see eProcurement technologies being leveraged to facilitate the introduction of a radically new framework for procurement within the Irish public sector. While the potential benefits to be derived from the successful implementation of the initiative 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 inside and outside their sector. 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 eProcurement initiatives that are not based on a foundation of sound procurement practices and processes and appropriate organisational structures are unlikely 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 public sector buying community and 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 public 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 public 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 the initiative's 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 public 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*** The eProcurement initiative has been developed on the principle of encouraging rather than mandating agencies to participate. It is critical therefore that the initiative is successful in achieving the senior management 'buy in' at national, sector and agency level which is necessary if the proposed procurement framework is to be adopted by a wide range of agencies.

## References

- <sup>1</sup> Department of Finance; Revised Estimates for Public services, 2001
- <sup>2</sup> European Parliament and Council Directive 97/52/EC of 13 October 1997 amending Directives 92/50/EEC, 93/36/EEC and 93/37/EEC concerning the coordination of procedures for the award of public service contracts, public supply contracts and public works contracts respectively
- <sup>3</sup> Council Directive 93/37/EEC of 14 June 1993 concerning the coordination of procedures for the award of public works contracts
- <sup>4</sup> Council Directive 93/36/EEC of 14 June 1993 coordinating procedures for the award of public supply contracts
- <sup>5</sup> Council Directive 92/50/EEC of 18 June 1992 relating to the coordination of procedures for the award of public service contracts
- <sup>6</sup> Strategic Management Initiative; Excellence through performance; May 2000
- <sup>7</sup> Information Society Commission; Third report of Ireland's Information Society Commission; December 2000
- <sup>8</sup> Forfás eBusiness Monitor, June 2000
- <sup>9</sup> The Treaty establishing the European Community, incorporating the amendments of the Amsterdam Treaty of 2<sup>nd</sup> October 1997
- <sup>10</sup> 1994 WTO Agreement on Government Procurement
- <sup>11</sup> Directive 98/4/EC of 16 February 1998 of the European Parliament and Council amending Directive 93/38/EEC coordinating the procurement procedures of entities operating in the water, energy, transport and telecommunications sectors
- <sup>12</sup> Directive 1999/93/EC of the European Parliament and of the Council of 13 December 1999 on a Community framework for electronic signatures
- <sup>13</sup> Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ('Directive on electronic commerce')
- <sup>14</sup> Electronic Commerce Act, 2000
- <sup>15</sup> Freedom of Information Act, 1997
- <sup>16</sup> Gartner Group; Real eProcurement savings do not come from software; May 2000
- <sup>17</sup> PricewaterhouseCoopers; E-supply chain: revolution or e-volution; September 1999
- <sup>18</sup> Council Directive of 17 September 1990 on the procurement procedures of entities operating in the water, energy, transport and telecommunications sectors
- <sup>19</sup> Better Value Wales, The Review of Procurement in the Welsh Public Sector, February 2001