May 2006

Strategic Guide to e-Procurement

Australian Government Information Management Office
# Strategic Guide to e-Procurement

## Executive Summary

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Procurement Framework Context

This Strategic Guide to e-Procurement outlines approaches to the automation of procurement processes typically undertaken by Australian Government agencies. The Guide also provides tools and case studies to inform agencies how e-procurement can assist them to increase efficiency, and improve their productivity and accountability.

E-procurement is essentially a number of inter-related methods for improving the procurement process through the use of electronic systems and processes. Under the devolved responsibilities of the Australian Government Procurement Policy Framework agencies must ensure the implementation of these methods is compliant with the Commonwealth Procurement Guidelines (CPGs), and all relevant financial, policy and legislative provisions.

Year 2000 e-Procurement Implementation Strategy

In 2000, the Commonwealth Government developed and implemented an e-procurement strategy. The strategy provided agencies with a framework to build and enhance their capabilities to trade electronically, and encouraged suppliers to consider their own directions for e-commerce. The strategy set two goals for Commonwealth agencies:

- to pay all suppliers to Government electronically by the end of 2000; and
- to be able to trade electronically with all ‘simple procurement’ suppliers who wish to do so, using open standards, by the end of 2001.

The strategy was successfully implemented with over 90% of transactions across agencies now being paid electronically, and widespread use being made of simple e-procurement tools such as online catalogues and electronic invoicing.
Further Opportunities for e-Procurement

Since the implementation of the 2000 Commonwealth e-Procurement – Implementation Strategy, technology and business conditions have changed. Agencies are now looking at further opportunities to gain operational efficiencies through e-procurement.

Many agencies are already undertaking a variety of e-procurement activities as part of their day-to-day operations. Some examples are:

- booking and purchasing travel online
- buying stationery on electronic catalogues or utilising a Vendor Managed Inventory (VMI)
- paying suppliers by Electronic Funds Transfer (EFT)
- utilising invoice-less payments through Recipient Created Tax Invoices (RCTI)
- online authorisation and electronic submission of purchase orders to suppliers
- publishing Requests for Tender (RFTs) and Requests for Quotes (RFQs) through AusTender.

A common misconception with e-procurement has been that it was often thought to be only electronic catalogues or e-marketplaces. The automation of any part of the procurement to payment process with electronic tools can be defined as e-procurement.

Figure 1 below shows a broader concept of e-procurement and highlights some of the e-procurement tools now available in the planning, procurement and payment areas.

Figure 1: e-Procurement: Procurement to Payment

<table>
<thead>
<tr>
<th>PLANNING</th>
<th>PROCUREMENT</th>
<th>PAYMENT</th>
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<tbody>
<tr>
<td>Request for Quote (RFOs)</td>
<td>Catalogues</td>
<td>Credit or Purchasing Cards</td>
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<td>Request for Purchase (RFPs)</td>
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<td>Contract and Supplier Management</td>
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<td>Tender Evaluation Tools</td>
<td>Financial Management Information (FMIS) systems</td>
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<td>Electronic Auctions</td>
<td>Vendor Managed Inventory (VMI) systems</td>
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<td></td>
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<td>Recurring Payments</td>
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</table>
<pre><code>                      |                                         | Electronic Invoicing          |
</code></pre>
Adding Value with e-Procurement

Before implementing any e-procurement initiative, it is important to identify how e-procurement tools will add value to your business processes. Establish early which e-procurement projects will deliver the most value to your agency and dedicate appropriate time and resources to them. Conducting an analysis of your agency’s purchasing profile can help to provide an understanding of which business processes should be addressed, and which e-procurement tools should be used.

Different e-procurement tools have different benefits and implementation costs. It is necessary to weigh up the potential benefit of automation as well as the potential for improved governance, against the costs of implementing and maintaining e-procurement initiatives. By using a simple two-by-two matrix of Spend by Category and Frequency of Activity (including Planning, Procurement or Payment activity), agencies will be able to identify which tools are best suited to their purchasing profile.

Figure 2 below shows four different quadrants corresponding to different spend profiles. Each quadrant represents a different business situation and potential e-procurement opportunity.

**Figure 2: Benefits of Automating Procurement**

- **Governance Focus**
  - Sourcing
  - Electric P/Os
  - EFT
  - Recurring Payments
  - Mitigate Risk

- **Dedicated Solution**
  - Electronic P/Os
  - ERS/RICTI
  - Direct Connect
  - e-Sourcing Tools
  - Invest in Systems

- **Rationalise & Reduce**
  - P-Cards
  - One Time Vendors
  - Minimise

- **Provide Enablers**
  - Catalogues
  - Electronic P/Os
  - P-Cards
  - Electronic RFX
  - Streamline

**Executive Summary**

- **Governance Focus**
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  - Streamline

**Frequency of Activity**
- Sourcing/Contracts
- Transactions/Purchases
- Payments/Invoices

**Increasing need for Governance and Control**

**Increasing benefits from Automation**

**Spend by Category**
- High
- Low

**Frequency of Activity**
- High
- Low
Governance Focus

When a category controls a significant amount of spend but has less frequent activity, the focus of the procurement process should be on improved governance and control.

E-procurement tools can assist here by:
- maintaining audit trails and activity logs
- using tools such as Electronic POs, Sourcing tools and EFT to mitigate risk and maintain governance.

Dedicated or customised systems are less likely to be viable from an automation viewpoint due to the lower volume of activity.

Dedicated or Customised Solutions

In this quadrant where the amount of spend in a category is high, and there is a high amount of activity (planning, procurement, payment) taking place, it is important to leverage or invest in systems capability.

This is the quadrant where it makes sense to implement fully enabled electronic solutions such as:
- direct connection between buyer and supplier
- high volumes of electronic purchase orders (POs)
- invoice-less payment using Recipient Created Tax Invoices (RCTIs) and
- specialised e-sourcing tools.

These solutions require a significant investment in time and resources to setup and maintain, but this should be offset by the benefits they can bring.

Rationalise and Reduce

In this quadrant, purchases are typically small in both spend and frequency. Due to the limited volume and value of spend, e-procurement activities may be better focused elsewhere as the cost and effort of implementing a dedicated or customised solution may only result in limited benefit to your agency.

Provide Enablers

In this quadrant where the spend on a category is low and would not normally support a dedicated solution, but the frequency of activity is high, it is still worthwhile investigating whether a dedicated or customised solution would reduce the amount of time and effort associated with the activity.

Tools like electronic RFX, POs, catalogues and P-cards are solutions that could be applied to streamline the process.
Benefits from e-Procurement

By recognising that e-procurement is not a “one size fits all” solution, and taking a measured implementation approach that focuses on tangible business benefits, agencies have been better able to focus their activities on those areas where the highest return on investment could be delivered.

Agencies that have implemented e-procurement projects have realised benefits such as:
- accelerated time to market for sourcing and procurement activities
- improved governance and probity through maintaining an electronic record of activity
- reduction in resources associated with administration of procurement processes.

Their success has been assisted through:
- establishing metrics to measure the potential benefits and tangible outcomes
- developing a robust business case and tracking the progress against that business case
- appointing a single point of accountability to assume responsibility for the project
- managing stakeholders in order to obtain and maintain buy-in to the project
- providing clear communication to employees, stakeholders and suppliers
- understanding suppliers’ concerns and ensuring their continued support.

In summary, e-procurement success can be achieved by combining an understanding of the purchasing profile of your agency with an appreciation for the different e-procurement tools available, and implementing the appropriate tool to suit the business case and/or any identified business problem.
1 Starting Out

Understand your current state of procurement

Prior to launching any e-procurement initiative it is necessary to identify how e-procurement initiatives can drive benefits within your agency.

A current state assessment will highlight any business problems or inefficiencies experienced in the purchasing process, and help pinpoint those areas where e-procurement technology could streamline and automate the procurement process.

It is necessary to understand:
- your agency’s procurement strategy, objectives and future directions
- the business rules that apply to procurement
- existing and past e-procurement initiatives in your agency and other agencies
- e-procurement functionality available within your Financial Management Information System (FMIS), Enterprise Resource Planning system (ERP) or those systems available to all agencies such as AusTender.

It is also necessary to:
- review all of the elements of procurement to develop and deliver a complete solution including:
  - an analysis of spend categories, transaction volumes and other procurement details to identify which spending is best suited to e-procurement
  - which contracts and preferred suppliers are most used
  - categories or procurement processes that are seen as “problem areas”.

By developing an understanding of your current procurement processes you will be in a better position to develop e-procurement initiatives that will best support your present and future business needs and will compliment other organisational strategies.

Align e-procurement with your broader procurement strategy

When selecting e-procurement technologies, remember the best solutions are often the simple ones.
- Take a strategic view – look at the whole procurement process
- Look for a holistic solution – integrate, re-use and communicate.

Remember the best solutions are often the simple ones
Points to consider:

- the interoperability needs of your technology. An integrated technology strategy will need to fit with the components of your procurement processes. Limit your risk – don’t use technologies that would be difficult or might not integrate.
- scalability – make sure your solution fits your needs
- open or modular products – look at all the possibilities. Ask the question – can you use software that conforms to standards and supports the interchange of data using open standards and formats?
- make sure when making decisions about your purchasing practices you have taken into consideration all Government guidelines for example, environmental guidelines. The Department of Environment and Heritage has developed guidance for Australian Government agencies on environmental purchasing (sometimes called “green” or “sustainable” purchasing) which can be accessed at www.deh.gov.au/settlements/publications/government/purchasing/purchasing-guide/index.

Consider all government guidelines when making decisions about your purchasing practices

Plan your e-procurement implementation

Some e-procurement implementations require significant change management to fully realise all potential benefits. Others may require only minimal change. Regardless of the size of the project the e-procurement implementation should be managed as an integrated project. For a successful outcome:

- develop a robust business plan
- develop a project management plan that outlines the major outcomes, outputs, project activities and timeline
- set project milestones and track progress against them
- appoint a single point of accountability (SPA) to manage the project
- understand ongoing administration and allocate personnel to manage these tasks.
## 1 Starting Out

<table>
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<th>SUMMARY OF CHECKPOINTS</th>
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<td>Planning</td>
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- ✓ Use e-procurement to address procurement business issues
- ✓ Identify where the most business value can be derived from the project
- ✓ Consider e-procurement within the broader context of the procurement task
- ✓ Break the task into simple or smaller projects and tackle them sequentially to help you build momentum
- ✓ Be mindful of incremental benefits
- ✓ Establish a “champion” or senior management owner who supports the initiative
- ✓ Involve stakeholders at all stages of the project
- ✓ Change management is the key to a successful implementation
Identify your Needs
2 Analyse your spending pattern

The first step in any e-procurement initiative is to analyse your agency’s spending on procurement. The analysis will identify key suppliers and spend categories with potential for e-procurement. By analysing past procurement activities you will gain a detailed picture of your agencies spend profile, an understanding of purchasing patterns, current supply base and the total spend across categories.

A spend analysis is essential to identify:

• what products and services your agency purchases, who in the agency purchases them, and from which supplier
• the value and number of transactions conducted and opportunities to consolidate expenditure to obtain volume discounts and reduce the number of invoices
• products and services that can be standardised (items available for purchase that can be limited to a standard selection)
• total number of transactions and value per supplier (determine whether there is any opportunity to aggregate supply to fewer suppliers)
• piecemeal buying (one-off purchasing outside the agency’s contracted supplier agreements) and the level of compliance with approved contracted suppliers.

The results can also be used to support your business case for e-procurement. For example aggregating supplier contracts can simplify the supplier enablement process by reducing the total number of suppliers and streamlining business processes. Suppliers are not interested in expensive e-procurement connections that deliver little in the way of order volume or commercial benefit. The higher the transaction value and volume for a supplier the more likely it is that e-procurement would be considered.

The data required to perform a spend analysis will usually come from an FMIS or ERP system, using the Accounts Payable System, the General Ledger, and/or a Purchasing system and/or from suppliers. Typically, a 12 month period is used to gather the data as it takes into account any seasonal variations and will provide an accurate picture of your agency’s current purchasing profile.

Spend information can be segmented in a variety of ways in order to understand purchasing patterns, the current supply base and total spend across categories.

Spend information can be segmented by:

• value of spend per category and % of total spend
• volume of transactions – number of purchases and invoices per month
• number of suppliers and number of contracted suppliers
• criticality of product or service and risk of supply
• frequency of sourcing the product or service through going to market
• long-term suppliers versus short-term suppliers.
Spend categories which may be found in a Government purchasing environment include:

<table>
<thead>
<tr>
<th>Goods/Consumables</th>
<th>Services</th>
<th>Operating/Utilities</th>
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</thead>
<tbody>
<tr>
<td>Stationery</td>
<td>Outsourcing</td>
<td>Fleet/Fuel</td>
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<tr>
<td>IT Hardware</td>
<td>Printing</td>
<td>Capital Projects</td>
</tr>
<tr>
<td>IT Software</td>
<td>Temp Labour</td>
<td>Rent/Leases</td>
</tr>
<tr>
<td>PC Peripherals</td>
<td>Travel</td>
<td>Utilities</td>
</tr>
<tr>
<td>Office Equipment</td>
<td>Property Services</td>
<td>Services</td>
</tr>
<tr>
<td>Furniture</td>
<td>Cleaning</td>
<td>Mobile Phones</td>
</tr>
<tr>
<td>Uniforms</td>
<td>Catering</td>
<td>Insurance</td>
</tr>
<tr>
<td>Subscriptions</td>
<td>Consulting</td>
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<td>Parking</td>
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<td>Memberships</td>
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<td>Couriers</td>
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By conducting a step by step process for each category, you can obtain a detailed understanding of the key categories; key suppliers; those used sporadically; and potentially key line items that are purchased on a regular basis. Look at existing contracts and determine if there is potential to buy smarter.

Spend information can be classified at the category, supplier and line item level. A spend analysis at the:
- category level identifies spending on each particular category, for example Utilities
- supplier level breaks each category into services within that category, for example breaking Utilities up into Gas and Water suppliers in different states, cities or regions
- line item level breaks each supplier’s data into the services or goods supplied within the category. In the case of Utilities this can be broken into fixed monthly supply charges versus variable usage charges, including peak and off peak charges, as well as maintenance.

A full spend analysis can be a major undertaking, and you may not need to complete a full line item analysis of the entire spend profile to be able to identify which areas of spend would be suitable for enablement with e-procurement technologies.

It may only be necessary to undertake a high level category analysis that provides the initial top 10–20 category spend areas. These can then be broken down into key suppliers and then potentially into key line items.

**Prioritise your e-procurement potential**

Upon completion of the spend analysis, all categories should be prioritised as to their e-procurement implementation potential. Identify the categories which are sourced frequently and generate the most number of transactions.
2 Identify your Needs

Upon completion of the spend analysis, all categories should be prioritised as to their e-procurement implementation potential

For those categories sourced occasionally, but purchased frequently, the emphasis may be on automating the transactional procurement process through electronic Purchase Orders (POs), catalogues and workflow.

For those categories that are sourced frequently it may be more appropriate to utilise a panel of approved suppliers and then use an electronic sourcing tool to issue Request for Tenders (RFTs) on a regular basis.

The e-procurement strategy developed will depend on the procurement profile of the agency. For example, an agency with a low volume of transactions with suppliers may find it difficult to justify an automated transactional procurement system, but may obtain benefit through using a supplier system. Alternatively, an agency with a high volume of transactions may well be able to construct a robust business case based on automating processes and streamlining the work required to execute the purchasing activity.

Identify the categories best suited to e-procurement

Some spend categories are more suited to online-purchasing and payment than others. For example, stationery and travel suppliers have online purchasing systems that have been used for some years by different government agencies. Once your spend analysis is completed, examine each category against the following criteria to understand if it is an appropriate candidate for e-procurement:

- risk – low risk items are often the first used for e-procurement initiatives
- frequency – e-procurement systems can offer transactional savings for frequently purchased items
- contracted – it is best to use e-procurement where there are established terms and conditions.

To start with online purchasing, choose items where the quantity, price and delivery terms can be specified. Items or services where these factors are not specified should be looked at in more detail to ascertain their suitability for transition to an e-procurement system. Categories most suited to e-procurement are often best implemented first. Your agency can gain valuable experience by initially piloting a simple e-procurement initiative.

To start online purchasing choose items where the quantity, price and delivery terms can be specified
Identify your e-procurement ready suppliers

Although a category may be suited to e-procurement, it is important to understand whether the supply base is e-enabled. Supplier needs, issues and concerns should be considered to secure their support. Where suppliers already have technology in place it should be easier to implement an e-procurement arrangement.

As part of the spend analysis, it is important to understand which suppliers are ready to undertake e-procurement

Some small and medium sized businesses (SME’s) are not interested in expensive connections that add to the cost of supply and deliver little in the way of order volume, especially if they are supporting multiple e-procurement systems for various agencies.

With future suppliers e-procurement readiness can be included as part of the tender and evaluation criteria.

With current suppliers determine how long the relationship has been in place, if they are a successful supplier overall, and if the category is going to be tendered in the near future. Do not pursue the path of e-procurement if the supplier is unsuccessful overall, as applying e-procurement in a problem environment will result in e-enabled problems.

You will need to consult with your suppliers to gain an understanding of their capabilities and any concerns they may have. Determine:

- the types of e-procurement capabilities and initiatives the supplier can offer
- what e-procurement activities have been successful and/or cost-effective
- if the suppliers system can integrate with your existing ERP and/or procurement system
- if the initiative with this supplier will result in additional fees or charges.

Identify where savings are possible

At the completion of the spend analysis exercise, you should have a spend profile covering the number of suppliers, volume of spend, number of transactions and frequency of procurement. This information can then be used to identify areas where savings may be possible and processes that can be improved.

For example, improvements and savings could be achieved through:

- minimising leakage by automating the buying process
- consolidating piecemeal purchases into larger, less frequent transactions
- standardising products
- contracting suppliers of frequently used products and services
- aggregating purchases.
2 Identify your Needs

<table>
<thead>
<tr>
<th>SUMMARY OF CHECKPOINTS</th>
<th>Identify Agency Spend</th>
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<tbody>
<tr>
<td>✓ Identify systems from which you need to gather data</td>
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<tr>
<td>✓ Select category level of segmentation</td>
<td></td>
</tr>
<tr>
<td>✓ Identify high transaction spend categories</td>
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<tr>
<td>✓ Document which e-procurement method you might use for these categories</td>
<td></td>
</tr>
<tr>
<td>✓ Assess suppliers and potential suppliers for e-procurement readiness</td>
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<tr>
<td>✓ Store data compiled for future use</td>
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</tr>
<tr>
<td>✓ Ensure new systems categorise data at the point of entry to assist with ongoing spend analysis information</td>
<td></td>
</tr>
<tr>
<td>✓ It may be possible to specify in contracts with suppliers a requirement to provide spend data over a defined time period</td>
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Assess and Review
Once you have undertaken the spend analysis it is necessary to assess and review your entire procurement processes focusing on:

- how procurement policy and processes are applied
- identification of inconsistencies at a whole of agency level
- inefficiencies and duplication including processes that require manual intervention
- any user issues
- system leveraging opportunities.

By identifying those business processes that are causing organisational issues, and combining this knowledge with the spend profile of the agency, the exact areas and processes where e-procurement initiatives can best be applied can be determined.

Some examples of e-procurement business process reforms that can achieve better buying and improve procurement processes include:

- invoice consolidation
- electronic issue, receipt and payment of invoices
- mandate the use of the e-procurement system for purchases. System controls can limit the decision purchasers make, restricting orders to contracted suppliers.

The next step in the process of implementing an e-procurement initiative is to prepare a business case requesting funding for the project.
Build your Business Case
Whenever an e-procurement project requires funding, it is likely a formal business case will be needed. This section outlines some common themes and factors to be considered when preparing an e-procurement business case.

**Think about leveraging existing technology**

Before establishing the business case examine your agency’s existing technology platforms to see if they offer the required functionality. Find out what systems are in place in your agency and what other agencies are doing. Considerable funds are often spent on implementing FMIS or ERP systems. By working in partnership with another agency (or agencies) you may be able to leverage and utilise existing investments as an alternative to implementing expensive system upgrades.

**Look for opportunities to share services**

Opportunities to share, reuse and consolidate e-procurement investments and initiatives amongst agencies should always be thoroughly investigated. Information sharing and collaboration between agencies when planning, developing and implementing e-procurement can help to achieve maximum benefits.

Sharing services can provide economies of scale from the pooling of resources, skill sharing, consolidation of technology, sharing of service providers and a reduction in duplication. E-procurement activities already in use by your agency or other agencies can inform your new e-procurement initiatives and help to reduce the level of any associated risk.

Efficiencies can also be gained by the reuse of common items amongst agencies such as documentation, business and service delivery processes and re-engineering, project plans and methodologies and information and communication technology.

**Establish your e-procurement business case**

Your business case should provide the information required to enable a fully informed decision to be made on whether funding (or other resources) should be provided and/or whether your proposal should proceed. Guidance is provided by AGIMO at http://www.agimo.gov.au on developing an ICT business case for projects with a significant ICT component.

You will need to provide an evaluation of viable alternative options. Explain how e-procurement will deliver value for money, identify areas within the agency that are impacted by the project and how stakeholders are affected. Most importantly you should provide an outline of the resources required, an analysis of the costs, benefits and risks and other qualitative information in order to evaluate your options.
Develop your business case

In developing a compelling business case you will need to:

- consider your agency business case processes and requirements
- define the business problem to be addressed
- provide background information and evidence to support the project including:
  - how the project will integrate with the agency’s systems and processes
  - complexity of the project
  - previous agency experience in implementing similar projects
  - whether the e-procurement technology is untried or has been successfully used in other agencies
- include an outline of all the options that could deliver the desired solution
- identify and get the support of a senior sponsor for the project
- identify and involve key stakeholders throughout the business case development
- provide an estimate of whole-of-life costs of the e-procurement project
- identify and describe tangible and intangible benefits that will be realised
- rigorously assess risks and develop a risk mitigation plan
- establish the estimated ROI for the project and include how it was calculated in the business case.

Identify benefits and costs

Detail the tangible and intangible benefits and calculate the expected Return on Investment (ROI) – see Figure 3 – Return on Investment. Do not assume a high level of uptake when compiling your business case – few e-procurement initiatives ever receive 100% compliance unless they have been mandated and enforced.

Typical costs to be included in the ROI include:

- resources such as employees, contractors and consultants
- change management including training costs
- system costs including hardware, software and communications
- maintenance and on-going management of systems and processes
- management and/or administration.

Typical benefits include:

- staff can be freed up from transactional activity and deployed to more value-adding activities
- improved business processes through automation and data collection
- reduced time expended on activities allowing for more efficient processing
- improved governance.

The Department of Finance and Administration has produced the *Handbook of Cost Benefit Analysis* for evaluating projects with major resource implications.
4 Build your Business Case

Return on Investment (ROI) – ROI is the dollar value measure of an agency’s ability to use its assets to generate value. ROI is calculated through measuring the benefits produced over time divided by the cost of the project. Typically ROI is measured over periods of 1, 3 and 5 years.

When calculating the ROI, it should be taken into account that very few projects achieve 100% compliance in a short period of time. The business case needs to be conservative in estimating the uptake of the project.

Figure 3: Return on Investment (ROI)

An example of establishing ROI
The scenario for this example is that of an agency installing a Purchasing Card (P-card) program and Expense Management System.

ROI Calculation:
ROI (%) = net benefits ÷ costs

Costs:

<table>
<thead>
<tr>
<th>Cost Factor</th>
<th>Calculation</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td>Contractor required to facilitate rollout for six weeks at $500 per day</td>
<td>$15,000</td>
</tr>
<tr>
<td>Software</td>
<td>Expense Management Software – $100,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Expected software upgrades/maintenance per annum</td>
<td>$5,000 pa</td>
</tr>
<tr>
<td>Resources</td>
<td>Half a full-time staff member to administer the P-Card program – estimated at $30,000 per annum</td>
<td>$30,000 pa</td>
</tr>
</tbody>
</table>

Using these cost elements, the total cost for the first year of the project operation would be $15,000 + $100,000 + $5,000 + $30,000 = $155,000

After year one, the ongoing annual costs would be maintenance costs of $5,000 plus staff costs of $30,000, a total cost of $35,000.
Benefits

- Elimination of POs – It is estimated that 1,000 purchase orders per month will be eliminated. POs are estimated to cost $15.00 in transaction costs. However, the cost of the POs has been based on people’s time, and it is unlikely any FTEs will be eliminated, so this is not factored into the equation. Total dollar benefit = $0.
- Elimination of FMIS licenses – An FMIS license costs $700. 30 users have been identified and agreed to use P-cards instead of the FMIS system. These licenses will not be renewed. Total dollar benefit is $700 * 30 = $21,000 once off savings.
- Payment terms – 25 suppliers have been identified to pay via P-card have payment terms of Net 30 days. P-cards pay the supplier in approximately 5 days. The suppliers offer a 2% discount if paid in 10 days. Total annual spend across the suppliers is $5M. Total dollar benefit is $5,000,000 * 2% = $100,000 annually.

This makes the total year one benefit: $21,000 + $100,000 = $121,000

After year one, the ongoing annual benefits would be $100,000

The following table outlines the costs and benefits over the 3 year evaluation period for the project.

<table>
<thead>
<tr>
<th>Period</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefits</td>
<td>$121K</td>
<td>$100K</td>
<td>$100K</td>
<td>$321K</td>
</tr>
<tr>
<td>Costs</td>
<td>$155K</td>
<td>$35K</td>
<td>$35K</td>
<td>$225K</td>
</tr>
<tr>
<td>ROI: Benefits – Costs</td>
<td>-22%</td>
<td>186%</td>
<td>186%</td>
<td>43%</td>
</tr>
</tbody>
</table>

The total 3 year ROI is 43%, and when divided by the number of years, gives us a benefit of 14% per annum. This suggests that the project would offer substantial benefits for the costs involved.
e-Procurement Methods
— Moving to an e-Procurement Environment
5 Moving to an e-Procurement Environment

The following three sections outline some e-procurement tools to assist in streamlining and improving processes for planning and sourcing, transactional procurement, and payment:

- Planning Tools
- Procurement Tools
- Payment Methods and Tools

Each section defines what the particular tool or technology is, how it works and what needs to be considered if moving forward with this option and provides case studies from agencies where these tools have been used successfully.
Planning Tools
Spend analysis, issuing and evaluation of a RFP, RFQ, or RFI (collectively referred to as RFX), contract or supplier management and negotiation using an auction, are sourcing processes that can be undertaken using electronic planning tools. The primary benefits of these tools are:

- an increase in speed to market and response
- more effective procurement activities through better understanding of agency requirements
- maximisation of value for money through effective leverage of competitive pressure in the marketplace.

### Spend analysis tools

Spend analysis tools are electronic methods or programs that automate the spend analysis process. The tools provide end users with quicker and easier access to spend data in order to structure sourcing strategies and make procurement decisions.

These tools operate with either live or historical data. Live spend analysis systems refresh the data on a periodic basis so all of the spend information is current. Historical based spend analysis systems mine and upload data into a spend analysis at a single point in time.

**Decide if live or historical data is needed, this decision will drive what types of spend analysis tools are necessary**

Spend Analysis Tools include:

- Spreadsheets
- ERP/FMIS system data
- Multi-dimensional statistical analysis programs
- Data warehouses
- Third party managed systems or databases.

If spend data needs to be accessed on a regular basis or an agency's spend profile changes frequently, a spend analysis tool that extracts live data is recommended. Typically, a software provider would provide this type of tool rather than an agency developing it in-house. These tools provide enhancements over traditional spend analysis methods because they also give end users the ability to "slice and dice" data in a multitude of different ways. These tools can provide end users with the ability to view line item detail on both orders and suppliers invoices.
When considering spend analysis tools remember the most sophisticated tools in the market will only be as useful as the underlying data that the tool is accessing.

**Spend analysis tools are only as useful as the underlying data**

Benefits of using spend analysis tools:
- speeds collection of spend analysis data from systems
- provides better opportunities to manipulate data providing more insight into spend profile and agency requirements
- potentially highlights additional sourcing/leveraging opportunities
- can provide multiple stakeholders with access to the same set of data
- automated spend analysis can reduce analysis time.

Challenges to using spend analysis tools:
- numerous different types of systems (General Ledger (GL), Accounts Processing (A/P), ERP/FMIS) may need to be accessed to gain a complete picture of the spend
- a lack of commonality of data for suppliers, part numbers, category codes and GL codes across systems
- potential for multiple supplier master records due to duplicate data
- spend tools are only as good as the underlying data, and significant data scrubbing may need to take place for the spend analysis to be useful information.

<table>
<thead>
<tr>
<th>SUMMARY OF CHECKPOINTS</th>
<th>Spend Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Identify the purpose of performing a spend analysis</td>
<td></td>
</tr>
<tr>
<td>✓ Determine the level of detail needed for the spend analysis</td>
<td></td>
</tr>
<tr>
<td>✓ Investigate if readily available tools will be sufficient to perform the analysis</td>
<td></td>
</tr>
<tr>
<td>✓ Establish who will need access to the data</td>
<td></td>
</tr>
<tr>
<td>✓ Determine if suppliers can provide spend information and in what format</td>
<td></td>
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</tbody>
</table>
E-RFXs (RFI, RFT, RFP, RFQ) Tools

E-RFX is the collective term for requests for information (RFI), requests for tender (RFT), requests for proposals (RFP), and requests for quotes (RFQ) through an electronic medium. These requests can be used independently, sequentially or as part of a larger negotiation process.

E-RFX is the collective term for RFI, RFT, RFP and RFQ through an electronic medium

An E-RFX tool is designed to help an agency to construct an electronic RFI, RFP, RFT or RFQ that can be issued to suppliers. AusTender, the Australian Taxation Office (ATO) Print Portal and the Department of Education, Science and Training (DEST) Buylt system are examples of E-RFX tools.

Typically, E-RFXs have one or all of the following functions:
- electronically distribute RFX information to suppliers
- capture suppliers’ electronic submissions of RFXs responses
- provide a specified template for specific categories being sourced
- limit supplier responses/specify types of responses to a set criteria or list of questions
- act as a repository for RFX responses including archive documents
- improve governance through maintaining an electronic record of all activities associated with the RFX process
- notify suppliers of success or failure of tender.

Suppliers can benefit through E-RFXs because:
- similar format for all RFX can result in a faster response time
- no supplier is disadvantaged as the same information is available to all
- suppliers have equal access to the buyer
- equal opportunity to respond, regardless of location or time zone
- electronic submission can reduce costs in terms of printing and postage.

E-RFX can offer suppliers significant tangible benefits

Typical process flow for a fully implemented E-RFX:
- buyer defines specifications for their required goods and service
- buyer prepares templates, or develops RFX document online and draws required information from PO, catalogue and contract data
- buyer loads specifications into the Web-based tool in as much detail as necessary
- buyer notifies the supplier (via email, public website, bulletin board or fax, phone call) and provides access to the portal where the E-RFX is located
• supplier accesses portal and completes E-RFX online, or completes associated
documentation and sends to buyer
• buyer accesses site to view supplier responses or reviews documentation.

E-RFXs are applicable to all categories, and provide the greatest amount of benefit
where the category is sourced on a frequent basis.

**E-RFX provide the greatest benefit where categories are sourced frequently**

Benefits of using an E-RFX include:
• reduces sourcing cycle time
• supports a transparent negotiation process
• provides a comprehensive audit trail
• improves repeatability of sourcing events.

<table>
<thead>
<tr>
<th>SUMMARY OF CHECKPOINTS E-RFX</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Understand where, when and how to use AusTender for RFX issue</td>
</tr>
<tr>
<td>✓ Evaluate the type of functionality needed over and above standard tools</td>
</tr>
<tr>
<td>✓ Establish templates that can be used for RFX preparation and issue</td>
</tr>
<tr>
<td>✓ Consult with suppliers to:</td>
</tr>
<tr>
<td>✓ identify their technical capabilities to receive or submit E-RFXs</td>
</tr>
</tbody>
</table>
CASE STUDY 1

Decreasing Sourcing Time through AusTender

AusTender is the web-based Australian Government electronic tendering system. Over 2,500 tenders are published on AusTender annually, and more than 30,000 suppliers are registered to use the system. AusTender creates substantial benefits by decreasing sourcing time, the cost of tendering for suppliers, and by improving the management of tender processes for the Commonwealth.

AusTender enables suppliers to access Australian Government business opportunities online, download tender documentation, and submit tender responses electronically. All agencies under the Financial Management Accountability Act 1997 and a number of agencies under the Commonwealth Authorities and Companies Act 1997 are required to advertise open tenders on AusTender. Agencies can elect to make the tender documentation available for suppliers to download, and can also request that suppliers submit their tender responses electronically through AusTender.

Suppliers can browse AusTender simply by accessing the website, but must register in order to download tender information and electronically lodge tenders. Suppliers can also register to automatically receive emails that notify them of tender opportunities directly related to areas that they have indicated are of interest. AusTender also provides suppliers with the opportunity to view tender award information under the 'Contracts Reported' section.

The AusTender electronic tender box uses encryption software to ensure the security of tender responses. The electronic tender box is similar to a traditional tender box: it is only opened after the tender has closed and when an authorised committee is present.

Further development initiatives for AusTender will include the expansion of the reporting function to improve transparency, facilitation of the tracking of procurement processes from approach to contract award and expansion of the search capability within the site to further improve suppliers’ discovery of tender documents. The AusTender website is accessible to anyone with internet access through www.tenders.gov.au.

Benefits

- Speeds the sourcing process for both agencies and suppliers, since tender documents do not need to be mailed
- Reduces the cost to suppliers of responding to tenders because there are no printing or delivery costs
- Provides a secure, geographically independent lodgement service for responses
- Reduces the cost to agencies of distributing tender documentation to interested suppliers
• Reduces the need in some cases to advertise tenders in newspapers
• Distributes tender responses from a central location, which streamlines management and tracking
• Reduces phone inquiries to agencies, as all tender documentation, updates and award information are available online
• No fees are charged to agencies or suppliers for use

Challenges
• Agencies need to be vigilant that all documentation posted is correct
• Agencies are responsible for ensuring suppliers understand how to submit their tender responses into the electronic tender box
• Suppliers need to be proactive in accessing AusTender and understanding how to use the system.

E-RFX evaluation Tools
After the suppliers have responded to a RFX, the agency must evaluate the responses as part of the negotiation process. An E-RFX evaluation tool weights or ranks each response and identifies the top supplier based upon the established criteria.

E-RFX evaluation tools rank each response and identify the supplier based upon the established criteria

E-RFX evaluation tools range from simple spreadsheets where supplier responses are manually input to a data sheet, to sophisticated tools where the information from a supplier’s submission is automatically extracted from the RFX response and evaluated.

Establish an agreed assessment criteria and weighting at the start of the RFX process. This will make the selection process more transparent and objective, and lead to a quicker supplier selection.
The steps in completing an E-RFX evaluation are similar to the traditional evaluation process:

• identify the criteria on which to assess the RFX response
• weight the factors in RFX documents
• develop the scorecard template
• extract the data from the responses and insert into the scorecard – either manually or via the E-RFX system
• analyse responses by scoring each supplier on the agreed criteria
• report those responses to the selection committee and stakeholders
• identify the best supplier and award the business.

E-RFX evaluation tools can be used for any category, however they offer the most benefit or value where:

• multiple suppliers submit responses and there is a large amount of data that needs to be assessed and evaluated
• many qualitative and quantitative factors need to be evaluated
• multiple stakeholders will contribute to the supplier selection process
• the category is highly sensitive or high in volume, and substantial validation as to how the supplier was selected is necessary.

Benefits to using E-RFX evaluation tools include:

• can speed up the supplier selection process
• provides transparency as to why a supplier was selected through reference to the evaluation scorecards and criteria
• improved fairness of supplier selection through agreement of the criteria up front of the sourcing process.


<table>
<thead>
<tr>
<th>SUMMARY OF CHECKPOINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-RFX Evaluation</td>
</tr>
</tbody>
</table>

✓ Agree internally on the assessment criteria at the start of the process
✓ Verify that the E-RFX tool is operational prior to releasing the RFX to the supply base
✓ Estimate what time savings will be made through using the tool
✓ Communicate with suppliers to ensure:
  ✓ adequate support and guidance on the E-RFX process is given
  ✓ they understand the format requirements of the E-RFX
  ✓ that any concerns with the process are quickly identified
CASE STUDY 2

Cost Savings through the Australian Taxation Office (ATO) Print Portal

Prior to the Australian Tax Office (ATO) establishing the Print Portal, all requests for printing quotations were individually faxed to suppliers. With the introduction of GST and tax reform in 1999, the number of documents that had to be printed or re-printed increased exponentially. The method of individually faxing quotes to suppliers resulted in a sourcing process of about 12 days. Due to the increased number of documents that needed to be printed, ATO needed to substantially reduce the sourcing time.

In October 2003, the ATO began running the Print Portal. The Print Portal is a simple web-based tool that allows authorised ATO end users to issue an Electronic Request for Proposals to all members of the ATO’s existing print panel contract. The Print Portal allows for a user to describe the requirements of the job into the system, including details on the type of print job, the size of the print run and the timing requirements. Once these details have been entered into the Portal, an email is then sent out to 32 suppliers that are members of the print panel. Suppliers are given 48 hours to respond to the quote. Internal users can not view any of the bids until the quote period has expired. ATO awards the successful supplier in the system and attaches the artwork. The Portal then triggers off an email to all unsuccessful bidders notifying them that they were not selected for the job. The end user then raises a PO for the job in their FMIS system.

The issue of security was initially a barrier to implementing the Print Portal, however utilising a mirrored portal and completing a full threat and risk assessment, alleviated the security issue.

Significant change management was required to move from the old way to the new way of doing things. A review of the Print Portal took place in October 2004, and only one of the 32 suppliers chose not to continue with the system.

By 2006, the Print Portal has had significant uptake with 600-800 print jobs worth approximately $8-9 million being run annually through the Portal. Cost savings have averaged approximately 12% per job.

The ATO is looking to further develop the portal concept, and to use the process for editing, graphics design, communications and photography, where there are similar panel arrangements in place.

Benefits:
- Reduction in sourcing time through using an electronic process
- Reduction in staff costs in managing the paper based sourcing process
- Tangible cost savings through better utilisation of the existing panel contract

Challenges:
- Funding for additional functionality
- Establishing stakeholder buy-in initially to move to the new system
6 Planning Tools

Contract Management Tools

Basic contract management tools are spreadsheets used to track contract expiry. Holistic contract management tools integrate with an FMIS/ERP system to allow agencies to track the creation, management and expiration of contracts in an efficient manner.

**Contract management is the act of establishing and managing contracts on an on-going basis**

Benefits of contract management tools include:

- provides all appropriate parties equal access to the terms and conditions
- increases visibility and mitigates risk
- enforces supplier compliance by providing contract details across multiple levels, helping to leverage total agency buying power.

Basic contract management functionality is available through some FMIS/ERP systems. Basic contract management should be used across all categories where possible, in order to maintain a central record of all current contracts.

More advanced functionality can be found in some FMIS/ERP systems (if particular modules are implemented), e-procurement systems, or a separate contract management tool. With more advanced functionality, purchase orders or blanket orders can be initiated directly by selecting line items from the contract. By ordering directly from the contract, tracking category spend is easier and overall spend analysis improves. Additional advanced functionality can include a document control system, templates, online storage and reporting.

**Advanced contract management tools enable purchase orders to be created directly from a contract established in the FMIS/ERP system**

Combined with supplier management tools as outlined in the following section, online contract management can provide valuable information to manage supplier arrangements.

Many agencies have an electronic contract management tracking system that tracks creation, renewal and expiry dates rather than having the key contract elements stored electronically and integrated with the procurement systems.
SUMMARY OF CHECKPOINTS

Contract Management Tools

✓ Understand what your internal requirements are for contract management
✓ Assess your FMIS/ERP system or other systems for contract management functionality
✓ Investigate if your FMIS/ERP system can support creating orders directly against contract line items in order to improve spend analysis and contract compliance
✓ Communicate with suppliers to ensure:
  ✓ that the contract information in the agency’s system is consistent with that of the supplier

CASE STUDY 3

BUYiT – The Department of Education, Science and Technology’s (DEST’s) Procurement Management System

BUYiT is a procurement and contract management system that was developed in-house for DEST. BUYiT is a sophisticated procurement and contract management system which:

- integrates with the department’s Human Resource and Financial Management System;
- guides DEST staff through often complex processes for the purchase of goods or services; and
- ensures that all procurements comply with the Commonwealth Procurement Guidelines and the department’s procurement related Chief Executive Instructions.

At the time of publishing, and since its initial production release on 1 March 2004, BUYiT has been used to initiate more than 4,300 procurements with a total value of more than $880 million. Over the past eighteen months the system has been gradually refined to improve usability, rectify minor bugs and simplify some business processes. BUYiT also supports procurement process changes required as a result of the Australian/United States Free Trade Agreement (AUSFTA) which came into effect from 1 January 2005.

A significant difference between BUYiT and systems previously used in DEST is that all financial data is held in SAP (and not replicated in BUYiT). Consequently the complicated data re-keying and reconciliation processes that were previously used are no longer required – and data integrity has improved significantly as a result. While still a work in progress, BUYiT has already provided substantial benefits to the department in areas such as procurement governance, accuracy and accountability.
Supplier Management Tools

Supplier management tools are used to measure supplier performance on a regular basis, identify key milestones for performance review and report on any changes to the supplier relationship. Some online tools also support audits across the contract management process. Supplier management tools automate these activities through electronic measuring of quantifiable metrics such as quality, delivery, scheduling, service level agreements, defects and cost. They can also include subjective concerns like capabilities and cultural fit.

Supplier management is the act of reviewing and providing feedback to the supplier on performance measures as defined in the contract

The benefits of online supplier management tools include:
- improves the identification of contract requirements and the collection of performance metrics
- provides a repository for the data which can be accessed by the buyer and suppliers
- provides access to data for historical analysis
- provides real-time feedback to suppliers about performance
- collects data on-line to ease integration with other stages in the sourcing process.

Supplier management tools can improve communication and the relationship between the supplier and agency. Supplier management can also improve the supply chain process through improvement in product usability, reduction in overall costs to market while maintaining the organisation's competitive edge.

Supplier management tools can enable both suppliers and agencies to more readily participate in value for money activities

Supplier management activities are usually conducted with suppliers that are critical or control a high amount of agency spend. A supplier management template can be built from the RFX documents and/or the actual contract to reduce time and ensure a consistent message is provided to the supplier. Templates should draw on the supplier Key Performance Indicators (KPIs) as specified in the contract and indicate the measures that will be used to assess supplier performance.

The basis for effective supplier management is to clearly specify the KPIs that the supplier will be measured on, then measure the supplier’s performance against these KPIs. Electronic supplier management tools allow for performance data to be shared between the buyer and supplier facilitating issues management and assisting with the resolution of issues.
Historical data from a supplier management system can assist with new contract negotiations. The data can be used to calculate supplier selection criteria and weightings.

Supplier management systems can increase the speed at which issues are recognised and addressed by the supplier, as well as providing clear and visible measurements of a supplier’s performance.

SUMMARY OF CHECKPOINTS
Supplier Management

- Establish criteria to identify suppliers to be monitored
- Investigate if there is a tool currently in place in your agency that has supplier management functionality
- Assess the FMIS/ERP system for supplier management functionality
- Ensure KPIs are in place for all suppliers that are to be monitored
- Consult with suppliers to ensure:
  - they are aware they will be formally monitored through a Supplier Management program
  - KPI’s are realistic and achievable
  - they have an understanding of how they will be evaluated and measured

Electronic supplier management tools allow performance data to be shared between buyer and supplier facilitating greater clarity in issues management and assisting the speed of resolving supplier issues.
6 Planning Tools

Electronic Auctions

Electronic auctions utilise interactive software and network technology to allow suppliers to submit real-time bids on products and services. Many of the steps of traditional sourcing and negotiation remain intact, but the actual negotiation of one variable, price, is conducted online.

Electronic Auctions including reverse auctions utilise interactive software to allow suppliers to submit real-time bids on products and services

Significant preparation is required before running an electronic auction including supplier pre-qualification, contract preparation and logistics for the auction day.

All e-procurement processes, and particularly electronic auctions, will need to be carefully analysed for compliance with the Commonwealth Procurement Guidelines. Electronic auctions have not yet experienced a high level of uptake in Australia, and have not been used to date by the Commonwealth Government.
7 Procurement Tools

Transactional procurement tools automate the purchasing process and usually include three main components – Electronic Catalogues, Electronic Purchase Orders (POs) and Automated Workflow. Systems can be implemented using either a dedicated transactional e-procurement system or leverage an existing FMIS or ERP system. Some suppliers also offer Vendor Managed Inventory (VMI) services as an extension to transactional procurement systems.

**Electronic Catalogues**

An electronic catalogue is a list of supplier products that is accessible through the internet.

Electronic catalogues can be managed in one of three ways:
- hosted and managed in house
- outsourced to a third party such as a marketplace
- hosted and managed by the supplier.

Electronic catalogues are best used when there is an existing agreement in place with an end-user base that understands electronic purchasing. Electronic catalogues are typically used for high-volume, low-value transactions where the manual PO process is often more costly than the items being purchased. Catalogues are ideally suited for environments where there are multiple users repeatedly making multiple purchases.

Categories best suited for electronic catalogues include:
- Stationery
- IT Hardware
- PC Peripherals
- IT Software
- Office Equipment
- Furniture
- Uniforms
- Equipment

Individual users can use a transactional e-procurement system to browse an internal catalogue or they can “punch out” to a supplier or marketplace hosted catalogue. Alternatively users may access a supplier’s e-commerce website which may offer supplier catalogue functionality directly without the need for an internal e-procurement transaction engine at the buyer’s organisation.
**Internally Hosted Catalogues**

In this scenario, the buying organisation loads the catalogue information directly into their transactional e-procurement system. End users then search and browse the internally hosted catalogue to locate the items they wish to purchase. This process and the advantages and disadvantages of internally hosted catalogues are detailed in Figure 4 below.

**Figure 4: Internally Hosted Catalogues**

- **Advantages**
  - Can be quick and easy to setup for small catalogues
  - Same look and feel for all catalogues makes it easier for end users
  - Access to all supplier information in one place can help drive compliance
  - P/Os still stored in internal system providing a record of orders and spend

- **Disadvantages**
  - Can require significant resources to maintain catalogue data
  - Does not provide real time to supplier prices or availability
  - Requires significant investment to setup and maintain
  - End users may find it more difficult to use at first – for example in searching
  - Still requires separate system to transmit PO to Supplier
  - Requires additional technology investment over base FMIS functionality
7 Procurement Tools

Punch out

Under a “punch out” scenario, the customer uses their transactional e-procurement system to punch out to access information from the supplier’s website and bring this information back into the internal procurement system.

The advantage of this approach is that the purchase details are still captured and stored within the buying organisation’s systems, but the actual catalogue can be maintained and updated by the supplier.

Suppliers tend to prefer this approach over providing their full catalogue for internal hosting within a buying organisation due to the lower maintenance required to ensure the catalogues are accurate at all times. Suppliers are able to own all of the information in the catalogue and can update it in a timely manner, while the customer is saved the expense of managing a catalogue in house or by a third-party. The process of punch out is detailed in Figure 5 below.

Figure 5: Punch Out Catalogues

Advantages
- Minimal internal catalogue maintenance by agency
- Access to up to date pricing and availability from Supplier systems
- P/Os still stored in internal system providing a record of orders and spend
- Can provide similar look and feel for different supplier catalogues

Disadvantages
- Requires in house transactional e-procurement system
- May not have the same look and feel as supplier’s own system
- Still requires separate system to transmit PO to supplier
- Requires additional technology investment over base FMIS functionality
E-marketplaces are an alternative to using either internally hosted catalogues or using the supplier’s catalogues. In an e-marketplace, the management of the catalogues occur through a third-party. The advantages of this include centralised catalogue management for buyers, but suppliers’ find this arrangement complex technologically and it can be expensive as they may need to pay a fee to host their catalogue in the marketplace.

**E-marketplace is an online market where goods and services are bought and sold over the internet**

E-marketplaces can provide a catalogue hosting service, a supplier connectivity service for sending and receiving electronic POs, a set of agreed contracts with pricing, or a combination of all three of these items. There are relatively few operational e-marketplaces in Australia at this time and the business model for this approach has not proven to be as attractive as was once thought.

**Supplier’s catalogue**

An alternative approach to using an internal transactional e-procurement system is to access a supplier’s website and catalogue and purchase directly from the supplier. In this case the buying organisation effectively uses the supplier’s system to process the order and may either pay for the purchase with a P-card or alternatively receive an invoice from the supplier.

This approach provides a cheap way of accessing electronic commerce and can leverage suppliers’ investments in powerful electronic systems. However, the downside to this approach is that the buying organisation may not have any record of the purchase transaction until the invoice is received, and end users may need to access and learn to use multiple supplier websites to complete their work.

Customers that directly access a supplier’s catalogue and use a P-card to pay for items create economies of scale for the supplier, as the supplier does not have to manage multiple catalogues, the customer does not have to create or update a catalogue, and payments are made electronically at the point of purchase, negating the need for an invoice. This process and the advantages and disadvantages of direct access to a supplier’s catalogue are detailed at Figure 6 below.
Using a Supplier’s catalogue is the most cost-effective way for both the agency and supplier to utilise electronic catalogues

Figure 6: Direct Supplier Catalogue Access

1. End Users browse Supplier Catalogue directly using Supplier e-commerce system

2. Order is created and lodged directly in the Supplier system

3. Order is paid either by P Card or by separate invoice

Advantages
- No internal catalogue maintenance or systems required by agency
- Access to up to date pricing and availability from supplier systems
- Cheap to setup and can be easy to use
- Requires minimal work by suppliers to setup for standard users
- Order is transmitted to supplier at the time of placing
- Some supplier’s can provide detailed reporting on purchases

Disadvantages
- Users may need to learn multiple supplier systems to do their jobs
- Orders and spend detail are not captured up front in the buyer’s system
- May require workflow approvals to be maintained in supplier systems
### SUMMARY OF CHECKPOINTS
**e-Catalogues**

Consider e-catalogues for spend categories when:

- ✓ The category is high volume and low value
- ✓ The category is currently on contract with an approved supplier
- ✓ Approval requirements have been considered for purchasing
- ✓ A decision has been made if the catalogue will be managed:
  - ✓ in house
  - ✓ outsourced to a third party
  - ✓ by the supplier
- ✓ A process has been documented to handle exception orders
- ✓ A single point of accountability has been identified for users and suppliers to contact regarding the catalogue system
- ✓ Identified frequent users have been consulted and informed of the changes
- ✓ Documentation has been posted on the intranet for new users on how to access the systems
- ✓ Consult with suppliers to:
  - ✓ ensure a good understanding of their capabilities
  - ✓ determine if a customised solution is required to be built
  - ✓ determine if the volume commitment offered by the agency warrants a customised solution by the supplier
  - ✓ establish an implementation timeline and tracking process such as the monitoring of orders placed electronically versus manually and the provision of reports back to the agency to encourage usage and compliance
Electronic Purchase Orders (POs)

An Electronic PO is a document that outlines the terms of an order, and outlines the agency’s terms and conditions to which both parties must adhere. Electronic PO’s can be generated in a transactional e-procurement system, or directly from an FMIS or ERP system from a requisition, and then sent via electronic means to a supplier for direct upload into their system.

**An electronic PO is a document that outlines the terms of an order and the terms and conditions of the agency**

Electronic POs are most readily used where:

- the purchase is relatively significant and requires terms and conditions to be attached
- the purchase is one-off and no existing agreement is in place with the supplier.

There are a variety of methods available for transmission of Electronic POs to suppliers, ranging from an auto-fax or auto-email system, through to transmission via direct connect, EDI style networks, or via a third party connectivity specialist.

Electronic POs provide benefits including speeding up the order transmission process, reducing errors and retaining a clear log of when orders were sent and what they contained. When fully implemented, this has the advantage of electronically enabling the communication of orders between buyer and supplier, and reduces handling time and eliminates re-keying of order information.

**Electronic POs aid in governance as all of the purchasing information is stored in a single location**

Electronic POs are created through:

- creating a PO through a FMIS or ERP system where the requisition and PO data is stored centrally and delivered to the supplier electronically
- creating a PO through a stand alone e-procurement system where the PO data is stored for procurement and accounts processing and delivered to the supplier electronically.

Electronic POs are not created by creating a written PO in the traditional method and scanning and emailing it to a supplier. In this situation, although the PO is being transmitted electronically, none of the purchasing detail is being captured and stored centrally in a database.
The advantages of Electronic POs over traditional POs include:
- line item detail leads to better accuracy for delivery
- easy for the accounts processing department to pay or reject an invoice
- speeds up the PO delivery and payment process.

Types of Electronic POs include:
- two-way PO match – where the payment is triggered by the invoice
- three-way PO match – where the payment is triggered by receipting the order of goods/services and then matched against the invoice.

Blanket order – this involves setting up one blanket order with a total amount and then allowing multiple invoices to draw down upon the blanket order. Blanket orders are typically used for contract agreements where the total amount is known or estimated and invoices are sent periodically. A two-way or three-way PO match can be used with a blanket order.

The main advantage of using Electronic POs is that if the supplier is able to receive the PO information electronically, they may be able to upload it directly into their order management system. This has the benefit of both avoiding re-keying data by sales operations staff, as well as minimising any chance for errors in the order. By keeping the ordering information electronic from start to finish the process is quicker, reduces errors and provides a clear governance and audit trail.

### SUMMARY OF CHECKPOINTS

**Electronic Purchase Orders**

- Identify functionality/capability of the FMIS or ERP system
- Select the applicable PO set up – blanket, 2-way match, 3-way match
- Educate users on changes that will take place during the move to Electronic POs
- Work with suppliers on changes to the process
- Communicate changes in ordering that are necessary
- Ensure legal contracts and standard Terms and Conditions cover sending Electronic POs
- Consult with suppliers to:
  - identify what technological changes are required to receive Electronic POs
  - identify what changes to internal business processes are required to accept Electronic POs
  - determine if an Electronic PO will change the payment cycle
  - establish which Electronic PO types will be the most process/cost-effective
Automated Approvals

Automated approvals are typically enabled through a transactional e-procurement or FMIS/ERP system, and are designed to translate the organisation’s delegation and authority rules into an electronic hierarchy for use in approving orders.

When automated approvals are used, an end user enters a requisition which is then automatically forwarded to their supervisor or delegate for approval. Once the requisition has been approved the requisition is sent to the purchasing department to turn it into a purchase order. The purchasing officer can approve or cancel requisitions at this stage. Some systems allow for automatic PO creation once a requisition is approved by the supervisor. Once the PO is created it is typically emailed or auto-faxed to the supplier.

Benefits of automated approval systems include:

- can reduce the amount of time from requisition submission to purchase order creation
- can reduce the cost of sending POs to suppliers due to lower processing overheads
- increases compliance with spend limits as long as the hierarchy is accurately maintained and checked during approval
- controls leakage as end users have to go through additional steps to add suppliers not currently in the vendor master list.

One issue with automated approvals is that in certain circumstances it can delay the time taken to create an order. For example, if the hierarchy is inaccurate or if an approving manager is out of the office or on leave, a requisition may not progress until approval is given. This can cause frustration for purchasers when they consider that they have placed their order, but it has not actually been processed and turned into an official PO.
Typically automated approvals are implemented when an entire e-procurement system or FMIS/ERP system is put into place. When it is enabled, approvals are usually utilised across all categories that require a purchase order, meaning that as part of the process all orders will be processed through automatic approvals.

**FMIS/ERP Systems**

Financial Management Information System (FMIS) or Enterprise Resource Planning (ERP) System are complex computer software systems used to manage and assist with the operation of large organisations. Given the investment many agencies have made in these systems, it is preferable to leverage the embedded technology in these systems to take advantage of e-procurement instead of purchasing individual applications through a separate supplier.

Some ERP e-procurement solutions are not integrated during the roll-out. Verify with the ERP provider as to what was included or “turned on” during implementation.

These systems automate and consolidate different organisational functions such as Finance, Human Resource Management, Procurement and Payroll, under one software system. E-procurement software is often available within the FMIS/ERP suite. FMIS/ERP systems can affect all parts of the procurement process (sourcing, transaction and payment) depending upon how it is set up for use within the agency.
Typically, the decision to implement a FMIS/ERP system is made at the highest levels within an agency, due to the number of functions the systems will affect and the expense involved.

E-procurement software available in most ERP systems provides technological features including:

<table>
<thead>
<tr>
<th>Function</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spend visibility</td>
<td>View spend by supplier and line item detail from PO information</td>
</tr>
<tr>
<td>Catalogue management</td>
<td>Creates electronic catalogues to support the procure to pay function for high-volume, low-value goods</td>
</tr>
<tr>
<td>Electronic PO</td>
<td>Creates POs and sends to suppliers via the internet or autofax, negating need for paper or mail</td>
</tr>
<tr>
<td>Supplier connectivity</td>
<td>Direct connection to suppliers so that suppliers can receive POs and pay invoices electronically in a totally integrated system</td>
</tr>
<tr>
<td>Automatic workflow</td>
<td>Speeds the approval process and eliminates lost requisitions or invoices and lag time</td>
</tr>
<tr>
<td>Electronic invoicing upload</td>
<td>Multiple bills from a single supplier can be paid through uploading one spreadsheet</td>
</tr>
<tr>
<td>Electronic receipting</td>
<td>Supplier is electronically paid upon receipting information. The supplier no longer needs to send invoices and invoices do not need to be processed</td>
</tr>
</tbody>
</table>

All categories can be routed through FMIS/ERP systems, using electronic POs or catalogues. However, if the purchase transaction data does not need to be captured in the FMIS/ERP system, or if the risk of purchase is low, a PO may not be required and an alternate method such as a P-card may be used.
## SUMMARY OF CHECKPOINTS

**FMIS/ERP**

- ✓ Gain an understanding of the functionality/capability of the FMIS or ERP system
- ✓ Understand and leverage existing e-procurement functionality within the FMIS or ERP system before purchasing additional software
- ✓ Consult with suppliers to:
  - ✓ ensure correct address and payment details are provided
  - ✓ communicate any changes to two-way or three-way POs
  - ✓ determine if any changes to the order/pay process will be needed with the use of the system
CASE STUDY 4

Consolidated Electronic Invoicing at the Australian Bureau of Statistics

The Australian Bureau of Statistics (ABS) used to operate an onsite storage room for their stationery supplies at their head office. This storage room was managed by 2 Full Time Equivalent staff (FTEs) and received multiple paper invoices for individual office supply purchases. When the ABS function moved office locations, they took the opportunity to implement consolidated electronic invoicing and a Vendor Managed Inventory (VMI) system with their stationery supplier.

In the new process, stationery cupboards are strategically located throughout the tenancy areas and are stocked with a range of 'standard' (or regular use) items. The level of inventory in the cupboards is monitored and restocked weekly, to pre-determined levels, by the office supplies vendor who is responsible for ensuring sufficient stock is available to meet all normal usage requirements.

The consolidated monthly invoice is e-mailed from the supplier indicating the items restocked in each cupboard and the particular project code for each order of non-standard items. A single point of contact at ABS receives this electronic monthly invoice, reviews it for correctness and uploads it directly into the ABS FMIS system. The result is that each individual project code is charged for the purchased supplies automatically. This process eliminates paper invoices as well as dramatically reducing the number of invoices received for office supplies to one per month.

As a single point of contact across all stationery purchases, ABS is able to monitor consumption across all individual cost centres within ABS and communicate to managers if their stationery consumption is exceeding average usage.

Due to the success of the combination of the consolidated electronic invoicing and VMI systems, ABS is considering using a similar model for other consumables.

Benefits:

- Reduction of invoices received due to the consolidated monthly electronic invoice
- Less administration required to reconcile invoices and allocate them to the correct ABS cost centre
- Stationery cupboard system is time effective for staff with immediate access to supplies
- Resource efficient, less than one staff member is now responsible for managing office supplies nationally
- Reduced consumption of stationery as staff do not need to maintain their own personal storage of consumables

Challenges:

- Requires cooperation with the stationery supplier to ensure that the correct cost centres are maintained and reported
- Electronic security requirements at ABS creates challenges that limit the use of the Internet for catalogue ordering for those items not stored in the standard cupboards
- VMI system is trust based – staff are allowed to use stationery as required
The payment process can be automated on its own in conjunction with a transactional e-procurement method. As part of the 2000 Commonwealth e-Procurement—Implementation Strategy, agencies were required to implement Electronic Funds Transfer (EFT). Substantial improvements in payment processes were made due to this strategy. However, there are still opportunities to improve the payment process through the use of purchasing cards, expense management systems, electronic funds transfer, evaluated receipt settlement, recipient created tax invoices, recurring payment and electronic invoices.

**Purchasing Cards (P-Cards)**

A purchasing card, or P-card, is a credit or charge card used to facilitate the purchasing process for goods and services. A P-card negates the need to establish a purchase order, and automatically pays the supplier without the requirement for an invoice. The difference between a P-card and a credit card is that a P-card account must be paid in full by the due date, usually monthly, whereas a credit card only requires a minimum monthly payment.

- **General P-cards** – used for all purchasing activity by authorised P-card users. These cards can be used instead of raising a purchase order.
- **Travel and Expense (T&E) Cards** – used for travel and entertainment purposes only. They provide a convenient method for staff to pay for their travel and entertainment expenses, and greatly reduce the number of T&E related invoices received by agencies. T&E card reporting can be used to monitor spend in this area.
- **Fleet Card** – used for fuel purchases and restricted spend categories such as repairs and other items available from service stations. The fleet card helps to consolidate spend and increase contract compliance with the preferred supplier.
- **One Card** – essentially a standard P-Card that is authorised for use for travel and expense, fleet and general purchasing expenses using a single card.

P-card programs are used to facilitate the procurement to payment process. P-cards can also assist with Fringe Benefit Tax (FBT) administration. A program administrator is usually assigned to approve and manage the process of distributing the cards and statements on an ongoing basis.
Implementation of a P-card program requires:

- appointment of a single point of accountability (SPA) for managing the project and acting as a central point of coordination with users
- identification of P-card users and card type required – for example frequent travellers may require T&E cards, while purchasing staff may use general P-cards for general low value purchases
- spend limits per transaction, which can be set on a per user basis
- spend limits per month, which can be set on a per user basis
- audit process for monitoring compliance with P-card policy
- a decision whether to restrict the merchants that can be used for P-card purchases – many cards offer the ability to block certain categories or merchants such as liquor stores, general retailers etc if necessary.

P-card suppliers have become more proactive in managing spend visibility and governance issues by adding additional services to the operation of the P-card. Spend transactions can be limited to selected merchant codes. Spend visibility can be improved by the P-card supplier providing periodically a data file with line item level detail which is then loaded into the FMIS/EMS system.

**An Expense Management System (EMS) is used to manage data and transactions that occur through P-cards**

**Categories suitable for P-cards**

P-cards can be used for any type of purchase where the supplier accepts P-card payments. P-cards are well suited for small, low-value purchases, reducing the number of purchase order invoices associated with these purchases.

**Enhanced P-card tools and functionality provide the opportunity to use P-cards in higher-spend areas**

The benefits of P-cards include:

- elimination or reduction of paperwork
- increased spend visibility particularly when combined with an EMS system
- enables the agency to reduce the number of suppliers processed using FMIS/ERP systems
- reinforces purchasing best practices
- EMS systems combined with P-cards can be a source of internal spend information
- streamlined accounts payable processes
- faster payment of suppliers
- supply base consolidation.
8 Payment Methods and Tools

Challenges of implementing and using P-cards can include:

- not all suppliers may be willing or able to accept P-card payments
- failure to integrate P-card data into FMIS/ERP systems can result in a loss of data compared to raising a PO and/or receiving an invoice
- governance may be perceived as an issue due to the “after the fact” approval method used with P-cards
- spend visibility can be more limited than through an ERP/FMIS system depending on the categorisation of data used.

<table>
<thead>
<tr>
<th>SUMMARY OF CHECKPOINTS</th>
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<tbody>
<tr>
<td>P-Card</td>
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</table>

- ✓ Establish if a P-card program is already in place
- ✓ Understand which suppliers are willing to accept P-cards
- ✓ Appoint a P-card administrator with responsibility for the project
- ✓ Determine which types of P-cards are necessary for target usage profiles
- ✓ Set per purchase and monthly spend limits per user
- ✓ Document P-card policies and procedures
- ✓ Train users on proper usage of P-cards
- ✓ Monitor and audit P-card program on an ongoing basis
- ✓ Consult with suppliers to:
  - ✓ determine if they can accept a P-card and for what categories or products
  - ✓ understand what types (AMEX, Diners, Visa) can be accepted
  - ✓ identify any changes to payment terms
Expense Management Systems (EMS)

EMS systems are used to manage P-card data and transactions. Frequent barriers for implementing a P-card program are the fear of loss of data and governance issues, as purchases from P-cards do not trigger or require a purchase order in the FMIS/ERP system. EMS systems alleviate these two critical concerns.

An EMS system can collect and consolidate large amounts of P-card data. This data is then used to identify what purchases have been made, from which supplier and by whom.

EMS systems work by receiving an electronic data file from the P-card provider (typically a large bank or financial institution). The data file contains all transactions that have been made using the P-cards in the program, and is able to be electronically uploaded into the EMS system using a standard format. This data upload enables an automated consolidation and verification of all P-card purchases.

Each card holder’s transactions can be coded with a description, a cost code and Goods and Services Tax (GST) or Fringe Benefits Tax (FBT) information, before being submitted for approval to the card holder’s supervisor. The supervisor can review all transactions identifying card holder’s who are non-compliant with the P-card policy and procedures. Once the transactions have been approved, the EMS will authorise payment for the card account which is usually made via the FMIS or ERP system.

In the case of travel and expense by agencies, end-users that use their P-cards can also access this system to submit travel and expense forms on-line, which automates the verification and payment process.

Most systems have similar functionality, but the systems do vary slightly so it is important to understand what the primary function and value of implementing an EMS system are prior to purchasing or implementing a system.

Benefits of using an EMS system include:

- speeds the verification and payment process for P-cards versus a paper process
- improves governance through enforcing an automated approval process and retaining an audit history of all transactions
- provides spend visibility through categorising transactions against suppliers and types of spend
- speeds T&E processing for employees who may require reimbursement of personal expenses.
Challenges around using an EMS system can include:

- choosing an appropriate EMS system that meets budget constraints and functionality requirements
- initially implementing an EMS system can require considerable effort and resources
- managing the change management issues associated with moving from manual processes to electronic processes, particularly training of end users.

**SUMMARY OF CHECKPOINTS**

<table>
<thead>
<tr>
<th>EMS</th>
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<tbody>
<tr>
<td>✓ Understand what current P-card usage is within the agency</td>
</tr>
<tr>
<td>✓ Assess if the level of spend with P-cards is high enough to warrant an EMS system</td>
</tr>
<tr>
<td>✓ Understand what capabilities the EMS system needs to perform</td>
</tr>
<tr>
<td>✓ Ensure the EMS system can work with the data file provided by the bank</td>
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</table>

**Electronic Funds Transfer (EFT)**

Since the inception of the 2000 Commonwealth e-Procurement – Implementation Strategy, 90% of payments have been moved online to Electronic Funds Transfer (EFT). EFT is one of the simplest acts an agency can take in order to streamline the payment process.

**EFT is a method of payment where the funds are directly deposited into the supplier’s bank account**

EFT is a method of payment where the funds from the agencies’ bank account is electronically transferred directly into the suppliers’ account for the payment of an invoice. The benefit of EFT is that the action of sending a paper cheque is eliminated and the agency saves on the costs of raising a cheque, processing and postage.

EFT is suitable for most categories as the only activity that needs to take place to move to EFT is to enter the supplier’s banking details and activate them as an EFT supplier in the FMIS/EFP system.

Typically, the most successful way to move to EFT is by analysing spend data to determine the suppliers with the most transactions in place and appoint a single point of accountability to contact the suppliers and request their EFT details, then manage the transfer from paper cheques to using EFT payments.
Benefits of using EFT:

- negates the need for cheques
- less expensive than traditional payment methods
- faster than the traditional accounts processing payment process.

Challenges of using EFT:

- suppliers must provide banking details – some may be reluctant
- reconciliation can be difficult
- payments are made with sometimes limited remittance information
- multiple suppliers in an ERP/FMIS system can result in problems
- paper remittance advices may still be required to be sent to suppliers
- electronic remittance advices may be required for suppliers reconciliation purposes.

EFT is an easy way to undertake an e-procurement activity and realise significant savings.

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<th>SUMMARY OF CHECKPOINTS</th>
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<tbody>
<tr>
<td>EFT</td>
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</tbody>
</table>

- ✓ Perform spend analysis to understand which suppliers produce the highest number of transactions
- ✓ Benchmark the percentage of transactions currently being paid by EFT
- ✓ Appoint a dedicated person to manage the EFT implementation
- ✓ Establish periodic metrics to meet in terms of moving suppliers to EFT
- ✓ Consult with suppliers to:
  - ✓ ensure accuracy of banking details
  - ✓ anticipate reconciliation issues and establish a process
Evaluated Receipt Settlement (ERS)

Evaluated Receipt Settlement (ERS) produces an automated payment to suppliers on delivery of purchases of goods without the requirement for a paper invoice from the supplier. When the supplier delivers the goods or service, a goods receipt is raised in the FMIS/ERP system to confirm that the goods or service have been received. The ERS program then generates an invoice on the basis of the price in the purchase order and the quantity as measured in the goods receipt.

ERS is when an FMIS/ERP system uses PO information and goods receipt information to automatically generate an invoice and pay it, without receiving an invoice from the supplier

The FMIS/ERP system also establishes tax information and terms of payment from the purchase order. This information allows the system to generate, post and pay an invoice, negating the need for a vendor invoice to be submitted to Accounts Payable (A/P).

Credit memos can also be created using ERS. If an invoice has already been posted for a goods receipt, and goods are returned, the system has the ability to automatically generate a credit memo for the returned quantity during the next ERS run.

The Evaluated Receipt Settlement (ERS) function has the following advantages:
- reduces the number of invoices received at Accounts Payable
- ensures payment is made at the contracted rate
- payment to suppliers can be accelerated as they do not need to send a separate invoice which may require separate approval.

There are some challenges associated with implementing ERS including:
- to use an ERS suppliers may have to modify their billing and processing systems and turn off the automatic invoice generation
- ERS does not cater for unexpected costs or items that are not known at the time of raising the purchase order
- suppliers paid via ERS are dependent on the agency raising a goods receipt in a timely fashion. In some organisations goods receipts are not raised all the time which means the supplier will not be paid expeditiously.

The Evaluated Receipt Settlement creates a log of completed transactions. In a standard purchase transaction, the supplier is required to issue a tax invoice in compliance with the GST legislation. Under an ERS scenario, the supplier does not submit a tax invoice, so the concept of a Recipient Created Tax Invoice (RCTI) has been established.

RCTI is where the agency creates a tax invoice and sends it to the supplier
The Australian Taxation Office has recognised that in an ERS system, the organisation receiving the invoice can create a tax invoice on behalf of the supplier which complies with relevant tax legislation. This Recipient Created Tax Invoice (RCTI) is simply the ERS generated invoice that accompanies the payment made to the supplier.

RCTIs can be issued by an agency if the following conditions are satisfied, as indicated by the Australian Taxation Office:

- both the recipient and the supplier are registered for GST
- the recipient and the supplier must have a written agreement stating which supplies are covered. The agreement must be current and effective when the recipient created tax invoice is issued.
- the Tax Office must have determined that those supplies are of a kind that can have recipient created tax invoices issued. A recipient created tax invoice must meet the following criteria to be valid:
  - contain all the information required for a tax invoice
  - prominently state the words ‘Recipient Created Tax Invoice’
  - prominently state the Australian Business Number (ABN) of the supplier and the recipient.

<table>
<thead>
<tr>
<th>SUMMARY OF CHECKPOINTS</th>
<th>RCTI-ERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Determine if a long-term and a positive relationship is in place with the supplier</td>
<td>✓</td>
</tr>
<tr>
<td>✓ Identify if the supplier has frequent occurrences of misappropriate billing or incorrect shipments</td>
<td>✓</td>
</tr>
<tr>
<td>✓ Undertake this initiative with trusted suppliers that have a high degree of correct orders and correct billing</td>
<td>✓</td>
</tr>
<tr>
<td>✓ Ensure that all ATO requirements are met for RCTI usage</td>
<td>✓</td>
</tr>
<tr>
<td>✓ Consult with suppliers to:</td>
<td>✓</td>
</tr>
<tr>
<td>✓ ensure an understanding of the changes that may be required to take advantage of RCTI ERS</td>
<td>✓</td>
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</table>
CASE STUDY 5

Utilising RCTI for Contract Labour at Centrelink

In 2004, Centrelink employed approximately 400 contractors across the agency and was receiving nightly or fortnightly paper invoices for each contractor. In order to reduce the number of paper invoices and automate the manual process, Centrelink leveraged the technology in their FMIS to electronically pay contractors without the need for them to submit invoices.

Centrelink utilised the Electronic Timesheeting functionality in their FMIS to create electronic timesheets for the contractors. The contractors enter the number of hours completed in a given week into the system. The timesheets are then electronically sent to the contractors’ manager for approval. The information is then automatically transferred out of the Human Resources portion of the FMIS and into the Financials.

Blanket Purchase Orders (POs) are established for the length of the contractor’s commitment indicating the total number of hours to be worked and the agreed contract rate per hour. The electronic timesheet “draws down” the number of hours from the blanket order and calculates the total amount of the payment against the established hourly rate. The receipt against the PO is then made by the purchasing officer. The payment process is then automatically triggered and an EFT payment is sent. A Recipient Created Tax Invoice (RCTI) is created and mailed to the suppliers along with a remittance advice.

Suppliers no longer provide invoices and the accounts processing function do not have to process the 20,000 or more invoices received annually for contractor services.

Benefits:

- Utilises technology available in the FMIS system
- RCTI negates the need for suppliers to send a paper tax invoice
- Reduced invoicing errors through using contracted rate for invoice calculation
- Reduced number of invoices for processing

Challenges:

- Travel & expense claims still need to be submitted separately
- Timesheeting entries currently need to be re-keyed from Human Resources module into Financials
- RCTI and remittance advice is printed and mailed to the suppliers manually
Recurring Payments

Recurring payments are used in instances where an agency needs to make a specific number of payments for a fixed amount over a fixed period. Benefits of using a recurring payment are that it negates the need to process multiple invoices or create a purchase order.

Recurring payments can be established through the agency FMIS/ERP. To establish a recurring payment the following information must be known:

- supplier name
- supplier number
- number of payments
- dollar amount of payments (which must be constant)
- payment start date
- payment end date.

To implement a recurring payments program the following actions must occur:

1. establish whether or not a purchase order or contract will be required of a supplier
2. create a form for stakeholders to complete to initiate a recurring payment
3. the form should be approved by the appropriate delegate
4. accounts processing would need to initiate notification approximately 30 days before the recurring payments are scheduled to expire.

Suitable Categories

A number of specific criteria must be met in order to use recurring payments. Because the payments must be fixed and made repeatedly on set dates, they are typically used for:

- Subscriptions
- Newspapers
- Outsourcing
- Property
- Cleaning
- Parking
- Fleet
- Rent/Leases
- Utilies
- Mobile Phones
- Insurances

Recurring payments can only be used where payments are fixed and the number of payments required is also known.
8 Payment Methods and Tools

Benefits of using Recurring Payments include:
• reduce administration for ongoing payments once they are established
• eliminate the need for regular invoices to be sent by suppliers.

Challenges of using Recurring Payments include:
• the payment amount must be the same for the entire payment period
• recurring payments may need to be reviewed on a periodic basis to ensure they do not continue beyond the life of the contract.

Consolidated Electronic Invoicing (CVI)

Electronic Invoicing is the act of suppliers electronically transmitting an invoice to agencies. In advanced methods of electronic invoicing, the buying organisation is enabled to receive and process the invoice using fully automated processes.

**Consolidated Electronic Invoicing is where multiple orders across billing codes are consolidated into one bill and sent to accounts processing**

Consolidated Electronic Invoicing is where multiple orders across billing codes are consolidated into one bill and sent to accounts processing. The consolidated electronic invoice is structured so that it may be automatically uploaded into the FMIS/ERP system and appropriated to cost centres.

There are multiple options for transmitting and receiving an electronic invoice.

**Option 1: Email invoice as PDF or electronic document**

This method is only slightly more efficient than sending a paper invoice, but can speed up the cycle time. The electronic document is sent via email to the agency and their accounts processing department print it out and key it in to the FMIS/ERP system for payment.

**Option 2: Email spreadsheet in CSV format for upload**

Some suppliers with high volume transactions consolidate monthly invoices in a spreadsheet in CSV format that is then automatically loaded into the agency FMIS/ERP system through a simple upload program. This is a common method of receiving invoices from high volume suppliers.

**CSV: Comma Separated values is a text file format where each line consists of multiple fields, separated by commas to delimit the data points**
Option 3: Send Invoices in XML format

Invoices sent electronically in XML format rather than CSV format have similar benefits to the CSV option but can be more flexible and robust. Relatively few suppliers are invoicing their customers in XML format at this time, but this is expected to increase over time.

Extensible Markup Language (XML) is a standard way or formatting text files for data interchange

Option 4: Invoicing via Supplier Portal

Suppliers logon to the Supplier Portal via a secure Internet web site and submit their invoices through the web site directly to the buying organisation. This has the advantage that any supplier who has access to the internet can use the supplier portal, and the invoice can be loaded directly into the buying organisation’s ERP system. The disadvantage of this method is that the suppliers need to key in the invoices manually to the supplier portal system.

Benefits of using Consolidated Electronic Invoicing include:
- can be a low cost method of processing invoices through one consolidated upload into a FMIS/ERP system
- many FMIS/ERP systems include a “bulk upload” facility as a standard feature
- many suppliers are able to provide consolidated invoicing in a standard electronic format at minimal cost.

Challenges of using Consolidated Electronic Invoicing include:
- significant work may be required to allocate the individual invoice components to the appropriate cost centres within the agency
- some suppliers may need to put in place special invoice processes to use consolidated invoicing outside their normal billing process
- setup of consolidated invoicing requires thorough testing to ensure that the data interface is working smoothly and accurately.
Infrastructure Considerations
Security

Security associated with implementing e-procurement requires the same careful consideration as any other IT-related system. The level of protective security required will be determined by:

- the type and sophistication of the e-procurement system
- use of web server technology
- the type of data and level of confidentiality required
- the level of associated threat and risk to the online environment.

Protective security activities should form an integral part of the your planning. Security should not be treated as an isolated activity. It should be part of an agency’s culture integrated into its corporate structure, practices and planning activities. Personnel should be made aware of the agency’s security policy and guidelines and of their specific responsibilities.

The Australian Commonwealth Protective Security Manual (PSM) directs government agencies to consider security implications of their electronic information systems and to devise policies, practices and procedures to protect resources appropriately.

The PSM requires that agencies comply with the Australian Government Information and Communications Technology Security Manual (ACSI 33) for the protection of information held on ICT systems. Compliance with relevant legislations or law (Commonwealth, State or local) is also required.

Consideration should be given to how ICT security is managed, documented and implemented.

Agencies should consider:

- their threat and risk assessment
  - consider the types of transactions conducted and identify the associated risk such as fraud and theft
  - determine the magnitude and likelihood of the threat and risk occurring
  - develop measures to manage and mitigate the threat and risks
- their security policy and framework documentation review or development
- system security plan
  - detail the level of security architecture and policies required for the system and each interconnection
- the role and the responsibilities of managers, administrators and users in relation to ICT Security
- security standard operating procedures
  - instructions to system users, administrators and managers on the procedures for maintaining a secure system
- review and audit controls.
Security issues relating to hardware, software and access control may include:

- physical security of communications equipment, servers and workstations
- hierarchy of control and access:
  - determine who will have access to the data and what level of access is required
  - will the data be used outside the agency and how it will be used
  - are security clearances required
  - are passwords required
- contracted service providers:
  - where are they located, is the provider in a different country and who’s law prevails
  - does the provider sub contract to other providers/carriers?

A range of firewall products, gateways, authentication mechanisms, access control mechanisms and encryption facilities can be used to protect systems and data. The choice and complexity of protective security measures are numerous and can sometimes be expensive. You need to ensure that the protective security measures are appropriate to the level of risk identified.

The Australian Government Information Management Office website www.agimo.gov.au provides further information about security and links to other resources.

**Interoperability**

Historically, an agency would implement one system at a time. For example financial, procurement, human resources and business units would work independently of each other to install and manage these systems and tools. Managing multiple, non-integrated systems promotes duplication of effort and excessive costs.

Interoperability allows different applications and systems to perform functions while communicating to exchange data with one another, or operating seamlessly. This can occur within one agency or across multiple agencies.

With e-procurement, this seamless operation is critical to ensure:

- service level information is available for ordering and invoicing requirements
- the data from purchase orders is updated in the general ledger
- the supplier details are available for payment by the accounts processing area
- the details of the goods and services purchased are available for later spend analysis.
Regardless of the selected platform, each product has generic strengths and weaknesses. Some of the strengths in e-procurement products include:

- web based e-procurement systems are generally seen as being easy to use for even casual users
- integration with FMIS/ERP systems is usually smooth and comprehensive
- there are numerous connectivity options available for connecting to suppliers including email, fax, and Internet tools
- the systems provide effective tools for loading and managing supplier catalogues
- many transactional e-procurement systems have a strong workflow approval process which enables clear authority levels to be implemented.

Common weaknesses across e-procurement systems include:

- systems may be designed for an overseas market and may not fit the Australian marketplace, e.g., Goods and Services Tax (GST) compatibility
- searching catalogues and locating the correct item can be difficult when there are thousands of separate Stock Keeping Units (SKUs) in the catalogue
- integrating invoicing with the FMIS/ERP system can be difficult
- the purchasing of Services as opposed to Goods is still challenging for most providers as items such as legal services, consulting, and complex printing may not fit easily into the ‘catalogue’ model and may require specialised solutions.

To ensure interoperability of an e-procurement system with other systems it is important to determine what interdependencies each system may have with the other. This can be achieved through open discussions with stakeholders in each area involved.

Some initial discussion points are listed below.

**What is the current environment?** Environment is used as a broad term and refers to all aspects including (but not limited to) applications, systems and tools, the network configuration, stakeholders, users, related strategies, policies and procedures.

**What resources are shared?** Resources refer to labour (within the business unit, corporate services and IT), facilities, equipment, data, and bandwidth.

**Do strategies, policies or procedures overlap?** E-procurement involves many areas of an organisation like finance (negotiating and paying suppliers), IT (implementing and maintaining online systems and tools), Human Resources (access to personnel data for workflow) and business units (end users). These different units may have related strategies to support the agency, but policies and procedures tend to be localised.
Therefore, strategies, policies and procedures of these areas need to be reviewed and sometimes revised to support e-procurement.

What standards and protocols are used to store and transfer data? When selecting an e-procurement system interoperability with internal financial and HR applications and systems will ensure shared data is accessible by all units. Externally, the e-procurement system may also need to pull data from a supplier’s product catalogue or punch out to a supplier’s website. It is also important to work closely with suppliers to understand their capabilities and limitations.

More information can be found in the Australian Government Technical Interoperability Framework which can be found at http://www.agimo.gov.au.

**Supplier Portals**

A supplier portal is a secure, internet site that is developed by the buying organisation to provide a comprehensive access point to supplier-related information. It may also be referred to as the buying organisation’s ‘extranet’ site.

**An extranet is a website that allows external parties access to an internal system or network**

Suppliers can logon to the portal to communicate and transact with the buying organisation. The supplier portal enables suppliers to complete transactional and payment activities such as receiving PO’s, sending acknowledgements that they can supply the necessary goods or services, creating Advance Shipping Notices (ASNs), submitting invoices and tracking invoice progress.

Some buying organisations provide additional information on their supplier portal, such as frequently asked questions for suppliers, standard terms and conditions and processes to be followed when dealing with the organisation.

The advantage of the supplier portal is that it is available to any supplier who has access to the internet and uses simple web browser technology. A disadvantage is that it may require suppliers to re-key the details of the PO into their sales order system manually rather than having an automatic interface into their system. This depends on the interoperability between the supplier’s and buyer’s systems.

More advanced buying organisations prefer supplier portals to other connectivity methods such as faxing. A supplier portal can be custom-built or bought from a software provider. The web site should be engaging, informative and user-friendly, and require an ongoing commitment of resources to design, implement and maintain. To be effective, the supplier portal must integrate with other Agency back-end systems and processes. This may add to the cost and complexity of the portal.
9 Infrastructure Considerations

Connectivity

Supplier connectivity refers to how buyers connect with suppliers to transmit POs and receive invoices. With the introduction of fax machines and other technologies such as Electronic Data Interchange (EDI) and Extensible Markup Language (XML), connectivity has expanded to include electronic-based documents, PC-faxing, scanning and other Business to Business (B2B) methods (i.e., Supplier Portals).

Suppliers are wary of expensive e-commerce connections which have not been able to deliver the promised returns to justify the investment when the volume of transactions is insufficient.

Smaller suppliers generally have a lower level of technical capability, and may not be able to devote the same level of resources to e-commerce initiatives as larger organisations.

Because connectivity works two-ways, buyers and suppliers can benefit from communicating their needs and requirements to the other before implementing costly infrastructure or process changes.

General issues with supplier connectivity are that few suppliers have the same level of investment in systems and tools as the buying organisations. With less sophisticated systems, there may be fewer options for uploads and data interfaces which means that a ‘lowest common denominator’ approach becomes more practical. This tends to be email and spreadsheets to which nearly all suppliers have access. This basic level of electronic supplier connectivity can provide some benefits, but for higher volume suppliers the more advanced data interface methods of CSV or XML formats are recommended.

Electronic Data Interchange (EDI)

Electronic Data Interchange (EDI) is a form of electronic commerce that supports computer to computer communications. EDI systems communicate via the transfer of files in a standard format between trading partners using secure electronic communication links. EDI provides high speed electronic communication but requires a significant investment and technological capability.

Some organisations are now replacing their EDI communication links with newer, cheaper internet-based systems.
Implementation
Building buy-in with the wider organisation can promote a successful e-procurement implementation. This can be challenging in a diverse business environment. Strong project management skills are required to support the different aspects of implementation including change management.

Building a comprehensive Implementation Plan that seeks to integrate the various e-procurement tools and processes within a wider procurement reform strategy will assist agencies to successfully manage the implementation and change process. This plan should be realistic allowing time for planning, technical and business integration, change management, supplier take-up and calculation and establishment of project ROI.

Risk Management

The risks associated with implementing e-procurement are typical of projects that incorporate technology, business process and information. Risks may include:

- not having a sound business case for implementation
- not getting buy-in from all key stakeholders
- supplier is unable to support the technical requirements
- supplier is unable to provide customer-specific product catalogues
- users within the agency do not incorporate the new procedures into their work routine
- implementation runs over budget

Because every agency's implementation will be unique, a comprehensive review of all possible areas should be undertaken to identify a complete list of possible risks. Areas may include:

- Environment
- Financial and Economic
- Management Activities and Control
- People and Communications
- Political and Legal
- Process Failure
- Quality
- Relationships
- Safety
- Security
- Technology
- Timing

An easy way to start is by maintaining a Risk Register. The register can be shared with key stakeholders, reviewed periodically and updated as required.
Basic information in a Risk Register can include:
- description of the potential risk
- likelihood of the risk occurring (e.g., high, medium, low)
- impact the risk would have on the project (e.g., high, medium, low)
- description of the impact
- avoidance, mitigation or contingency strategy
- identification of person responsible to manage the risk should it occur.

Other techniques for managing risks include developing a communications plan to share relevant information about the risks with key stakeholders at all levels across the relevant organisations (including suppliers). A communications plan can be used for the initial implementation period and ongoing activities. Quality guidelines can be developed and provided to the supplier to ensure expectations are set. Guarantees and Insurance can also be put into place if required.

**Stakeholder identification**

Stakeholders for e-procurement can include any person or functional area that “touches” the systems, tools or information being held. This may include people at all levels of the organisation and external contacts such as suppliers and outsourcing partners. An agency can have multiple procurement processes. It may be necessary to look across the entire agency for the appropriate stakeholders and to understand the different business rules as they apply to e-procurement.

The following list provides a general view of functional procurement areas and their potential e-procurement-related activities:

<table>
<thead>
<tr>
<th>Functional Area</th>
<th>Potential e-procurement-related activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts Payable</td>
<td>Maintain catalogues; Process POs; Process invoices</td>
</tr>
<tr>
<td>Audit</td>
<td>Ensure laws, rules, procedures &amp; guidelines are being followed</td>
</tr>
<tr>
<td>Buyers</td>
<td>Initiate requisitions; Access catalogues; Approve POs; Receipt purchases; Process invoices; Approve payments</td>
</tr>
<tr>
<td>Executive Sponsor</td>
<td>Champions program; Develops policy; Secures funds and resources; Supports policy and procedural changes across functional areas</td>
</tr>
<tr>
<td>Finance</td>
<td>Manage, analyse and access data; Develop &amp; implement policy and procurement processes</td>
</tr>
<tr>
<td>HR</td>
<td>Manage personnel data; Develop &amp; implement policy</td>
</tr>
<tr>
<td>IT</td>
<td>Implement, integrate &amp; manage online systems and tools; Develop business &amp; IT strategy; Develop &amp; implement policy</td>
</tr>
<tr>
<td>Legal</td>
<td>Write &amp; negotiate contracts</td>
</tr>
</tbody>
</table>
Implementation

Procurement
- Manage, analyse and access data; Source suppliers; Manage categories & contracts; Manage suppliers; Develop & implement policy; Receipt purchases; Approve payments

Security
- Develop & maintain security controls and requirements; Develop & implement policy

Suppliers
- Respond to tenders; Participate in contract management; Maintain catalogues; Process POs; Submit invoices; Receive payment

With so many people and areas affected by e-procurement it is necessary to identify at what level each stakeholder can or should be involved. It may also be helpful to limit involvement to one representative from each functional area.

Managing stakeholders

When managing suppliers, it is important to demonstrate the benefits of e-procurement as their engagement is critical to success. Communicate what e-procurement can and cannot do followed-up with regular progress reporting and quantifiable metrics. These messages, form part of a strong Communications Plan and will help to keep key stakeholders informed and manage their expectations.

Getting stakeholders to participate can be difficult, especially if they do not understand the value of the implementation to themselves and their functional area. A successful model includes a cross-functional team with members from each functional area (see list detailed in Stakeholder Identification). The team can support testing, development and training activities along with acting as product champions.

Here are some examples of how well-managed stakeholders at different levels in the organisation can positively impact an e-procurement implementation:

- key stakeholders can spear head the change management activities by reviewing and updating local policy and procedures that will be impacted by the implementation
- the Executive Sponsor can ensure new policies and procedures are put into place to drive uptake of e-procurement
- managers who are committed to e-procurement can encourage its use on a daily basis
- end users prefer a fast and easy procurement process. Their roles and responsibilities often change as a result of e-procurement. Changes should be identified and communicated in a way that allows them to absorb the information and incorporate it into their work processes.

Suppliers appreciate e-procurement when it reduces data entry, improves data quality and streamlines their work. By communicating agency objectives and strategy and understanding suppliers’ concerns it is possible to ensure suppliers’ continued support.
A well managed Change Management Program is critical to a successful e-procurement implementation. Experience shows that when there are strong policies and a mandate to use the system, there are higher levels of compliance and a better ROI than when use is optional. Some employees may have a natural resistance to change and will not use a new system unless it is enforced.

Best practice e-procurement implementations include identifying barriers to e-procurement and incorporating them into the Communications Plan and a Training Program. The barriers may be specific to the procurement process, the organisation itself or existing communication channels.

Successful implementations have training tailored to suit the end user’s experience levels. Some users will need significant training and assistance, and this should be incorporated into the overall Training Program. This could include issues with computer literacy, procurement literacy and learning styles.

Suppliers play a critical role in a successful implementation so their needs should be included in the Communications Plan and the Training Program. Both the Communications Plan and the Training Program should extend beyond the initial implementation and continue throughout the life of the e-procurement system.

**Reporting and Measurement**

The data collected in e-procurement systems can assist with mandatory reporting obligations, audit and accountability requirements, as well as internal reporting to assist with on-going development of its procurement strategy.

A successful e-procurement implementation is demonstrated by quantifiable metrics. Reporting on these metrics validates the ROI and ensures that key stakeholders are aware of the progress and the benefits the system brings to the agency. After the implementation is complete, the metrics and reporting should continue to further demonstrate e-procurement’s value to the organisation.

The first step in reporting and measurement is to benchmark existing procurement processes. This information can then be analysed and compared to the metrics collected after the e-procurement tools and systems have been implemented to support the business case and demonstrate the ROI.

These metrics should be reported on a regular basis through management reports and status updates to key stakeholders. Reporting methods can vary from a formal report to an update posted on an agency intranet site. The data can also be used to focus the project and to drive uptake.

Different agencies may use different metrics depending on their objectives and strategies. The metrics would be similar to those used for general procurement activities. Popular metrics for each e-procurement area are listed below.
Planning
- time (person hours) in writing an RFX
- number of RFXs distributed and the methods of distribution
- number of RFXs responses received and the methods of reception
- number of RFXs per category
- categories of each RFX issued by method
- dollar value of each RFX issued by method
- time (person hours) involved to review an RFX
- number of sourcing events per time period
- reduction in overall sourcing time
- increase in contract compliance.

Procurement
- number of users with access to the system
- number of users who actually used the system in the last reporting period
- number of suppliers available on the system (with and without catalogues)
- number of line items in electronic catalogue
- number of methods to initiate a PO
- average time (person hours) to raise a PO
- average time (person hours) from requisition to order
- number of POs per month created by method
- volume of POs per month created by method
- average monthly spend by method.

Payment
- number of invoices per month by method
- volume of invoices per month by method
- spend on P-cards by category
- percentage of total spend by payment method
- percentage of transactions by payment method
- days from receipt to pay
- invoice to PO matching rate.

Additional metrics such as those outlined below can be useful:
- compliance with preferred suppliers
- spend profile processed through e-procurement
- reduction in Purchasing and Accounts Payable staff
- improving efficiency of the Procure-to-Pay process.
Ongoing improvements

After a successful initial implementation, an e-procurement initiative needs to be monitored regularly. This includes periodic and planned reviews with a single point of accountability to manage the initiative on an ongoing basis. The reviews serve to promote the system’s success - by sharing metrics with key stakeholders - and to identify opportunities for ongoing improvements. The single point of accountability becomes a contact point for stakeholders and the impetus for those improvements.

As stakeholders (functional representatives) move to new roles, a replacement in that functional area should be identified. This includes the senior level sponsor.

Quarterly reviews with key stakeholders, including suppliers, are a good starting point. The actual frequency may vary depending on stakeholder availability and topic. All stakeholders should attend these quarterly reviews, or there could be an agenda item at an existing meeting, such as supplier management reviews.

Stakeholders’ needs may change over time to reflect strategy, policy and procedural changes. Therefore reviewing and updating stakeholder needs could occur whenever strategy, policy and procedures change. Metrics and reporting should also be updated to reflect these changes.

Both the Communications Plan and the Training Program should extend beyond the initial implementation period and continue throughout the life of the e-procurement system. A Change Management program for ongoing improvements would incorporate these activities:

- communications to introduce and promote new features, suppliers and categories while showcasing the benefits such as improved metrics and ROI
- training to support system upgrades and the introduction of new features, thus supporting the organisation’s changing requirements. Examples include: Induction, Refresher and a Roaming Help Desk.
Auto-fax is a system whereby a fax is processed without using paper, eg, a PO is auto-faxed from the buyer’s computer system through the buyer’s fax machine and transmitted through the telecommunications network to the supplier’s fax machine.

Automated Approvals translates the organisation’s delegation and authority rules into an electronic hierarchy for use in approving orders.

Consolidated Electronic Invoicing refers to multiple orders across billing codes that are consolidated into one bill and sent to accounts payable.

CSV Comma Separated Values is a text file format where each line consists of multiple fields, separated by commas to delimit the data points.

E-marketplace is an online market where goods and services are bought and sold over the Internet. Typically e-marketplaces require membership or registration to participate.

E-procurement refers to the automation of any part of the procurement to payment process with electronic tools.

E-RFX refers to the issuing and collection of request for information (RFI), request for tender (RFT), request for proposal (RFP) or request for quote (RFQ) through an electronic medium. The buyer can limit, measure and rank which suppliers are best suited to provide the goods and services.

EDI (Electronic Data Interchange) is a form of electronic commerce that supports computer to computer communications. EDI systems provide high speed communication via transfer of files in a standard format between trading partners using secure electronic communication links.

EFT (Electronic Funds Transfer) is a method of payment where funds from an agencies’ bank account are directly deposited into the suppliers’ account for the payment of an invoice. EFT works by electronically transferring an amount into the designated supplier account instead of issuing and sending a paper cheque.

Electronic Auctions or reverse auctions utilise interactive software and network technology to allow suppliers to submit real-time bids on products and services.

Electronic Catalogue is a listing of a supplier’s product offerings that is accessible through the Internet. Electronic catalogues list the supplier’s merchandise, as it would be in a paper catalogue, on a website.

Electronic Invoicing or e-Invoicing is a broad term that is used to describe the act of electronically transmitting an invoice to suppliers. In the most advanced methods of electronic invoicing the supplier is enabled to receive and process the invoice using purely electronic processes.
Electronic Purchase Order or Electronic PO is a document that outlines the terms of an order, and outlines the terms and conditions of purchase to which both parties must adhere. Electronic POs can be generated in a transactional e-procurement system, or directly by an FMIS or ERP system from a requisition, and then sent electronically to a supplier for direct upload into their system.

EMS (Expense Management System) is used to manage data and transactions that occur through P-cards.

ERP (Enterprise Resource Planning) is a complex computer software system used to manage information required to run large organisations.

ERS (Evaluated Receipt Settlement) is used to pay suppliers without receipt of a vendor invoice. The amount invoiced for each transaction is based on the order price in the PO and the quantity as established in the FMIS/ERP system, combined with the goods receipt. The FMIS/ERP system also establishes tax information and terms of payment from the PO. This information allows the system to generate and pay an invoice, negating the need for a vendor invoice.

Extranet is a website that allows external parties access to an organisation’s intranet site for the purpose of information sharing or performing transactions.

FTE (Full Time Equivalent) is the equivalent of one full time employee.

FMIS (Financial Management Information System) is a complex computer software system used to manage and run financial activities within a large organisation.

P-card (Purchasing card) is a credit card used to facilitate the purchasing process for goods and services. P-cards can also be used for purchasing speciality programs including: travel and expense, fleet or combined programs under a one card program.

RCTI (Recipient Created Tax Invoice) is issued by the recipient of the supply rather than by the supplier. An RCTI must be issued in accordance with Australian Taxation Office conditions. An RCTI can be used on its own or in conjunction with ERS.

Recurring payments are used where an agency needs to make a specific number of payments for a fixed amount. Recurring payments are made by setting up an automatic payment against the supplier in the FMIS/ERP.

ROI (Return on Investment) is the dollar value measure of an agency’s ability to use its assets to generate additional value. ROI is calculated through calculating the ratio of costs to benefits of the project for a time period.

SKU (Stock Keeping Unit) is a unique item which is held in inventory usually with a specific number so it can be tracked, reordered, etc.
SPA (Single Point of Accountability) is a designated person responsible to implement a solution.

Supplier Portal is a secure, Internet site that is developed by the buying organisation to provide a comprehensive access point to supplier-related information. It may also be referred to as the buying organisation’s ‘Extranet’ site.

VMI (Vendor Managed Inventory) is a service whereby the supplier assumes responsibility for stocking and maintaining the buying organisation’s inventory levels of the supplied goods to agreed service levels. The vendor then issues a monthly consolidated invoice for all items used.

XML (Extensible Markup Language) is a standard way of formatting data files or interchange between organisations and users.
References

Australian Government Information and Communications Technology Security Manual  

Australian Government Information Management Office  
www.agimo.gov.au

Australian Government Procurement Guidance  

Australian Government Technical Interoperability Framework  

AusTender  
Australian Government electronic tendering system.  
www.tenders.gov.au

Better Practice Checklists  
Practical guide for effective use of new technologies.  

Case Studies on Implementations  

Commonwealth Procurement Guidelines – January 2005  

Doing Business Online with Government  

Endorsed Supplier Arrangement (ESA)  
Through the Department of Finance the ESA provides pre-qualification of businesses in IT, major office machines, commercial office furniture and auctioneering industries to sell to Australian Government.  
www.esa.finance.gov.au/

E-business Information  
Through the Department of Communications, Information, Technology and the Arts, this site includes e-business publications, guides and resources on topics such as interoperability, Internet security, e-catalogue creation and management for buyers and suppliers.  
www.dcita.gov.au/ie/ebusiness

E-business Guide – an Australian guide to doing business online  
References

**E-business Guide – Getting Started**

**Project Methodology Overview**

**Electronic Transactions Act 1999**

**Financial Management Act Legislation**

**From Paper to Procurement**
An effective catalogue creation and management for buyers and suppliers.

**Gateway to Government Information and Services**
Information for small to medium enterprises on tenders and contracts with government and a link under the News and Features section to the document Selling to the Australian Government: A guide for business.

**Government Framework for National Cooperation on Electronic Procurement**
www.apcc.gov.au

**Guidance on Complying with Legislation and Government Policy in Procurement**

**Guidance on the Mandatory Procurement Procedures January 2005**

**Protective Security Manual**

**Review of Demonstration Projects**

**Selling to the Australian Government: A guide for business**
Provides information on how to identify opportunities and compete for government business.