This guide has been based on the outcomes of an action research study conducted between 2005 and 2007 on the Australian property and construction industry. The research was carried out by the Supply Chain Sustainability Project team for the Cooperative Research Centre for *Construction Innovation*. The research was aimed at improving the economic, social and environmental sustainability of the pre-cast concrete and resource recovery supply chains through the development, trial and evaluation of an innovative supply chain management strategy.

This guide presents strategies and actions for government sector clients responsible for capital infrastructure seeking to implement supply chain management ideas specifically in relation to information dissemination.

Benchmarking Guide for improving Information Dissemination through supply chain management

1. Supply Chain Management

The construction supply chain is composed of firms involved in upstream and downstream contractual relationships, who deliver a commodity (product and/or service) on projects. The supply chain, once formed, creates a flow of commodities, cash and information.
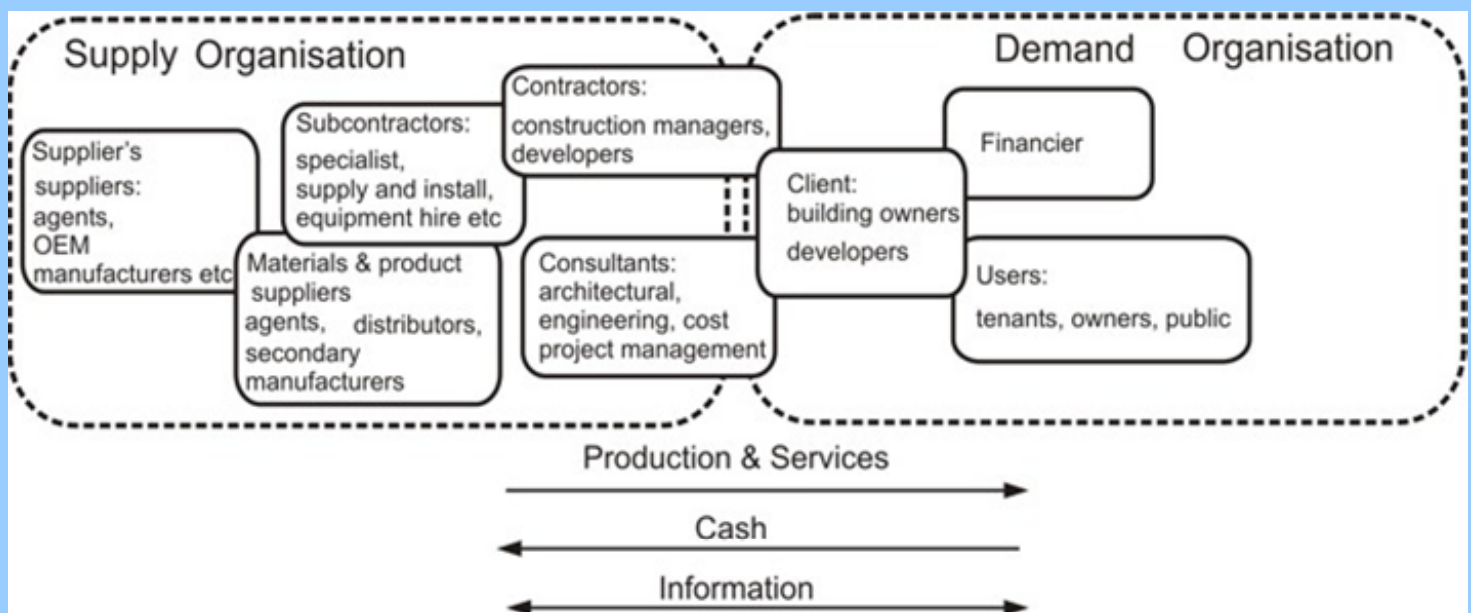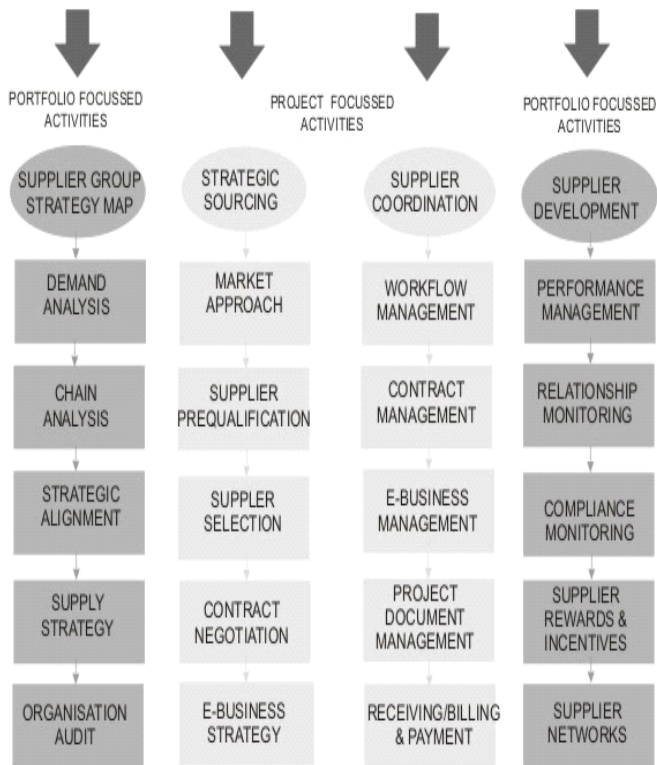

Generic construction industry supply chains (Source: London, 2007, p.101)

"The creation of the supply chain is impacted upon by the location of the individual firm within its market, which has unique economic structural and behavioural characteristics. The upstream and downstream linkages are affected by the nature of these markets. Linkages are also affected by the countervailing power relationships, which occur between the customer and supplier markets at different tiers in the chain" (London, 2004; 2007)

2. Supplier Group Strategy Map

SUPPLY CHAIN MANAGEMENT BLUEPRINT
SERVICES PLATFORM - CLIENT ORGANISATIONS
ROADMAP FOR EXECUTION

SUPPLY CHAIN MANAGEMENT FOR PROJECT BASED INDUSTRIES:
PORTFOLIO & PROJECT PROCUREMENT ACTIVITIES FRAMEWORK

PORTFOLIO FOCUSSED ACTIVITIES	PROJECT FOCUSSED ACTIVITIES	PORTFOLIO FOCUSSED ACTIVITIES	
SUPPLIER GROUP STRATEGY MAP	STRATEGIC SOURCING	SUPPLIER COORDINATION	SUPPLIER DEVELOPMENT
DEMAND ANALYSIS	MARKET APPROACH	WORKFLOW MANAGEMENT	PERFORMANCE MANAGEMENT
CHAIN ANALYSIS	SUPPLIER PREQUALIFICATION	CONTRACT MANAGEMENT	RELATIONSHIP MONITORING
STRATEGIC ALIGNMENT	SUPPLER SELECTION	E-BUSINESS MANAGEMENT	COMPLIANCE MONITORING
SUPPLY STRATEGY	CONTRACT NEGOTIATION	PROJECT DOCUMENT MANAGEMENT	SUPPLIER REWARDS & INCENTIVES
ORGANISATION AUDIT	E-BUSINESS STRATEGY	RECEIVING/BILLING & PAYMENT	SUPPLIER NETWORKS

Supply chain management for project environments
(Source: London, 2007, p.420)

Public sector clients and/or policymakers have the opportunity to change the structural and behavioural characteristics of the construction supply chain to achieve the following:

- increase efficiencies and productivity
- achieve government strategic objectives
- expand new markets
- reduce wasted government resources
- improve product quality

The Supply Chain Management Blueprint represents a holistic integrated framework. The first step is to understand the economics of the supply chain through a Supplier Group Strategy Map. The research carried out by the Supply Chain Sustainability Project team was concerned with the development of a "Supplier Group Strategy Map" for the pre-cast concrete and resource recovery supply chains.

The development of a Supplier Group Strategy Map will result from five key activities; demand analysis, chain analysis, strategic alignment, organisational audit and supplier strategies. The Best Practice Guideline for Government Supply Chain Management presented strategies and activities to assist government agencies understand, develop and implement supply chain ideas and actions by explicitly carrying out the five activities to develop a Supplier Group Strategy Map for the two supply chains.

The actions developed for the two supply chains revolved around the idea of improving information dissemination through supply chain management. This guide presents an example of how to benchmark government information dissemination through supply chain management based upon the two case study supply chain actions developed.

2. Government Information Dissemination

Modern information systems and tools offer unprecedented opportunities for information management and dissemination. Governments are in a prime position to utilize these technologies to improve communication and access to information for improved sector productivity and performance innovation through supply chain management.[1]

Government information dissemination presents a number of challenges including probity, equity, community and societal expectations. The government plays a *proactive* role in information dissemination whereby it should not only produce information and provide access to it but also announce, circulate, communicate, diffuse, publicize and carry publications.[2] Government agencies should therefore be concerned with more than the production of information, knowledge and publications and seek to ensure[1] that appropriate resources get to those participants who can improve competitiveness of the supply chains.[3]

A key part towards ensuring effective information dissemination is to determine the needs of the participants in the supply chains, which requires insights into their information needs. This in turn necessitates the conduct of some form of user needs analysis.[4] The case study examples highlighted, through a fact-finding exercise with the anticipated users of the information resources, that the common issues surrounding information dissemination through supply chain management can be grouped into three main themes of content, accessibility and timeliness.

Another key part towards improving supply chain information dissemination involves the development of clear targets or benchmarks to monitor the performance of the associated actions post implementation. The development of these benchmarks is again reliant upon insights into user needs and an identification of current level of information dissemination.[5]

The following three checklists have been designed to assist government agencies develop internal government agency benchmarks to monitor the performance of actions developed to improve supply chain information flow. The checklists act as triggers and should be adapted to agency needs. The checklists will help you to:
- define critical information needs and assess current information provision and infrastructure
- develop an action checklist to progress action to improve information flow to supply chains
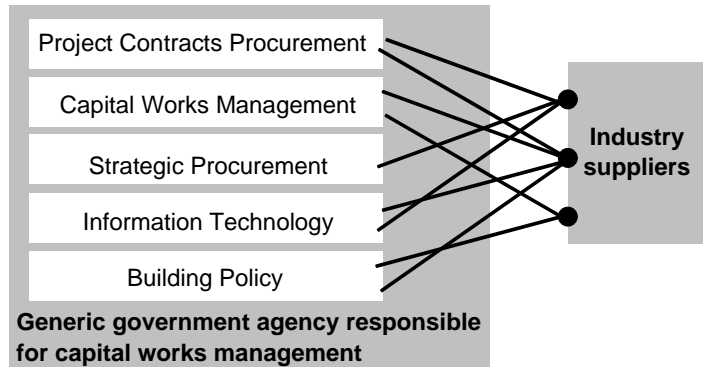- develop benchmarks for performance measurement

3. Taking Action to Improve Information dissemination

Useful information as well as appropriate information provision strategy is necessary to ensure effective information dissemination. Information needs vary from place to place, sector to sector and organisation to organisation. Effective management of government information resources requires agencies and users to know what information is available and where it is located. It is therefore critical to assess the specific needs of the key players within the supply chains, identify where the current information resources are located and align appropriate information provision strategy to achieve effective dissemination.
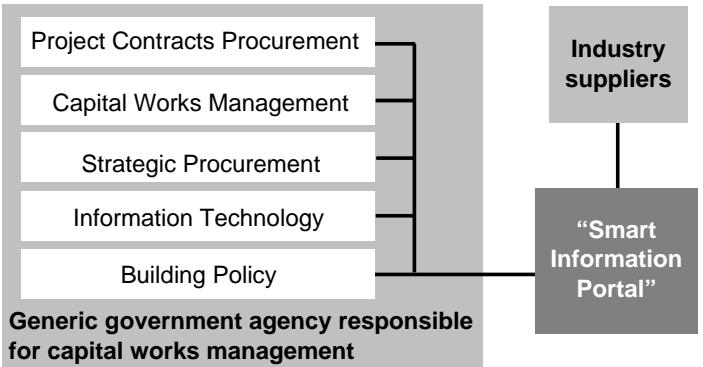
What type of information is needed to improve the performance of the supply chains?
What is the current scenario in terms of existing information provision and infrastructure?
Where do the current information resources currently reside?

Case study example 1:
In case 1, it was identified that the key players who supply critical items to the government agency needed to access accurate and timely project-related information. The information required currently resides in various units within the government agency and is disseminated through a rather ad-hoc manner.

Project Contracts Procurement
Capital Works Management
Strategic Procurement
Information Technology
Building Policy

Industry suppliers

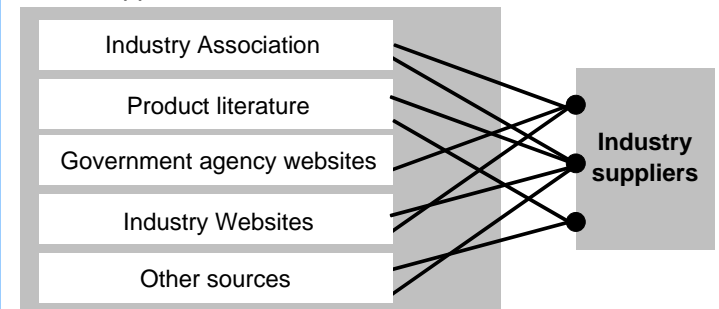**Generic government agency responsible for capital works management**

The secret is to develop a system that doesn't replicate or contradict the information provided by the various units. The action developed includes a "Smart Information Portal" (SIP), which provides up-to-date & reliable project-related information so that suppliers can access & plan their workloads.
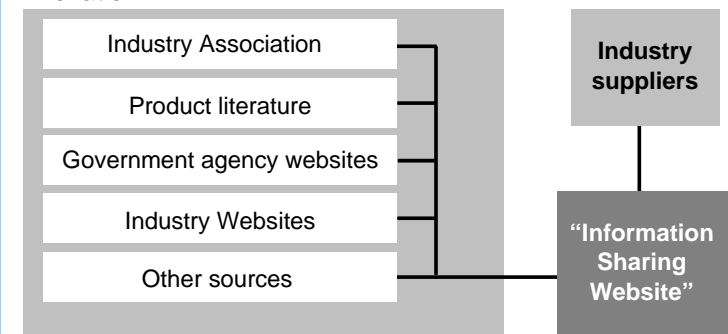
Project Contracts Procurement
Capital Works Management
Strategic Procurement
Information Technology
Building Policy

Industry suppliers

"Smart Information Portal"

Generic government agency responsible for capital works management

Case study example 2:
In case 2, it was identified that the key players in the supply chain required access to a comprehensive body of industry information particularly in relation to existing rewards and incentives available both nationally and internationally. There are many available rewards and incentives provided in the sector, however, information relating to these currently reside in various locations and is therefore difficult for the suppliers to access.

Industry Association
Product literature
Government agency websites
Industry Websites
Other sources

Industry suppliers

Information relating to rewards and incentives needs to be compiled for dissemination through a clear communication channel to support innovative practices. The action developed includes an "Information Sharing Website" (ISW), which provides industry-development information in relation to rewards and incentives through to encourage innovation.

Industry Association
Product literature
Government agency websites
Industry Websites
Other sources

Industry suppliers

"Information Sharing Website"

Checklist 1: Developing an action checklist

The next stage after identifying the information needs & current information provision is to develop an action checklist to progress the actions developed to improve information dissemination through supply chain management. The following is an example action checklist, which has been developed to progress the Smart Information Portal (SIP).

ACTION CHECKLIST	By Whom	By When
Consultation: Aligning objectives and developing strategies 1. Identify Key Supplier Groups & identify their objectives in relation to the supply chains [refer to Best Practice Guideline for Government Supply Chain Management Guideline for triggers/checklists] 2. All units within Government Agency related to the supply chains meet and align objectives in relation to SIP 3. Develop strategies to create SIP		
Performance: Establishing benchmarks and developing targets 1. Benchmark performance & develop targets 2. Resource appropriately & consider Supply Chain Capability & Strength analysis [refer to Best Practice Guideline for Government Supply Chain Management Guideline for triggers/checklists] 3. Measure success, report & communicate		

4. Benchmarking performance...

The first step to developing internal benchmarks to measure the performance of the action post implementation is to undertake an analysis to gather relevant feedback from the actual users of the Smart Information Portal or the Information Sharing Website. To do this, you need to identify the current information provided and also the 'wishlist' in consultation with the expected users of the Smart Information Portal or Information Sharing Website. The first table provides some example questions which can be used to develop an understanding of the users' needs and therefore develop appropriate targets. Based upon the information you've collected through this fact-finding exercise you can now develop appropriate benchmarks through a rating of low, medium and high as shown in the second table.

Checklist 3: Identifying user needs and current information provision

	Current	Wish List
Content Usefulness: What type of information do you receive and what would be more useful? Accuracy/Reliability: Within the timeframe that you're officially provided information, does the information change?		
Timeliness Relevance: How often are you provided information and how relevant is this? Alignment: Does the frequency in which information is provided align with your budgeting/business planning processes?		
Accessibility Usefulness: How do you receive information and what would be more useful?		

Checklist 4: Develop benchmark

	Low	Medium	High
Content ● Usefulness ● Accuracy/Reliability			
Timeliness ● Relevance ● Alignment			
Accessibility ● Usefulness			

Partners/general info/etc

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