

A Draft Strategy for the Building and Construction Industry

Move To Maximise Building Industry Potential

In February 1998, the Department of Industry, Science and Tourism released a draft strategy entitled Building for Growth.

The Department is seeking comment on the draft strategy, which covers the interrelated industries and businesses that design, provide, finance, own, operate and maintain the nation's built environment.

Building for Growth aims to provide a base to develop an action agenda consistent with the approach taken by the Government in its plan for Australian industry, Investing for Growth.

The proposed action agenda framework covers innovation, information technology, regulatory reform, exports, procurement and project delivery, workplace issues and environmental issues.

A key initiative from Building for Growth is a major industry forum to be held in May 1998, which will focus on innovation within the industry. The forum will give the Government and industry the opportunity to examine important issues and to consider options for boosting innovation in the building and construction industry.

Building for Growth is based on advice from the National Building and Construction Committee (NatBACC), an industry forum set up to work with the Government on property, building and construction matters [see separate report in this Issue of ACLN].

The Department will invite industry to take part in the further development of the strategy. The consultation period will close on 27 March, 1998 with a projected final strategy release date in May.

Comments on the draft are welcome and should be sent to:

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DRAFT STRATEGY

This Draft Strategy is aimed at creating a framework which allows the building and construction industry to achieve its full potential and maximise its contribution to the growth of an internationally competitive and outward

looking Australian economy. This strategy defines the building and construction industry in a broad sense that includes the interrelated industries and businesses that design, provide, finance, own, operate and maintain the built environment.

This Draft Strategy is supported by Building for Growth: Background Papers which includes:

- Formation and Role of National Building and Construction Committee.
- Recent Commonwealth Initiatives and Policy Relating to the Building and Construction Industry,

[see separate reports in this Issue of ACLN].

INTRODUCTION

The built environment is an integral aspect of our lives and underpins the economy. From the houses we live in and the offices and factories in which we work to water and gas systems, electricity, roads, railways, airports, hotels, and telecommunications networks, the efficiency of this industry is an important factor in the efficiency of many other industries, and the economy as a whole.

As we approach the new millennium, globalisation, advances in technology, and changes in the structure of the Australian economy are presenting new challenges to the industry. And the pace of these developments is ever increasing.

This wave of change will bring competitive pressures to which the property industry and the building and construction industry will need to respond by becoming even more efficient, innovative and competitive, and by continuing to look beyond Australia's shores for new opportunities in new markets.

This Draft Strategy is a first step in that direction. You are invited to consider the issues raised for discussion in this document and the suggested Action Agenda which aims to position the industry to better realise its potential and to build a better future for Australia.

Background to the Development of the Strategy

In December 1997, the Prime Minister, the Hon John Howard MP, announced Investing for Growth, a strategy for the development of Australian industry. In announcing this strategy, the Prime Minister advised that the Government will be working with business to promote industry growth and to develop Action Agendas to address impediments to growth in specific sectors.

Investing for Growth identifies Action Agendas as a means for industry and Government to work together in

partnership to enhance the efficiency and effectiveness of specific industry sectors. Major elements of Action Agendas include analysis of current industry performance, the identification of impediments to growth and the development of reform priorities.

In line with that announcement, this Draft Strategy, *Building for Growth*, is being released to assist in the development of a strategy and Action Agenda for the building and construction industry. The objective is to create a framework which allows the interrelated industries and businesses that design, provide, finance, own, operate and maintain the built environment to achieve their full potential and maximise their contribution to the growth of an internationally competitive and outward looking Australian economy.

This Draft Strategy is based on advice from the National Building and Construction Committee ("NatBACC"), which was established in September 1997 as a forum in which the Government and the industry can work together to develop new approaches to meet the challenges of the next century. A range of issues identified by the Committee are outlined in this Draft Strategy. The Committee will continue to advise on the development of the strategy and will work with the Government to implement the subsequent Action Agenda.

NatBACC is chaired by Mr Jim Service AM, Executive Chairman of J G Service Pty Ltd, and includes representatives from the residential and non-residential building sectors, building materials manufacturers, design professionals, specialist contractors, construction companies, property owners and developers and public works authorities. Details of NatBACC and its Charter can be found in *Building for Growth: Background Papers* [see separate item in this Issue of the Newsletter].

Finalisation of the Strategy

A final strategy is due for release by the Minister for Industry, Science and Tourism in May 1998 after a period of industry consultation. Any comments that contribute to its development would be welcomed so that it fully reflects the views of the industry. The purpose of the final strategy will be to articulate a vision of where these industries will be positioned in the future, and to identify areas where industry and government will work together to achieve this vision. The Action Agenda will detail initiatives the Government and industry will undertake during the remainder of 1998.

You are invited to participate in this consultation process, either by providing written comments or through attendance at one of the seminars that officers of the Department of Industry, Science & Tourism will be conducting in all capital cities through the coming months. Industry input will be a vital element to the development and implementation of the Action Agenda for this industry.

SUMMARY OF PROPOSED ACTION AGENDA

Innovation

The Government is promoting the innovation measures in *Investing for Growth* widely throughout the

building and construction industry. These measures are designed to:

- encourage increased R&D by Australian building and construction businesses;
- improve venture capital for the commercialisation of business R&D; and
- improve access to new technology for Australian industry.

The Government is working with the building and construction industry to conduct a major innovation forum for the industry. The forum, to be held in May, will focus on:

- showcasing the innovative nature of the industry by highlighting recent developments in design, products and processes;
- through workshops consider issues such as identifying the impediments and constraints to the diffusion of technology throughout the industry; improving the links between the industry, universities and public sector research organisations; how innovation can lead to environmentally sustainable design, planning, construction and maintenance outcomes; and how a performance-based building code will increase opportunities for innovation;
- promoting international science and technology collaboration and increased attraction of leading-edge technologies to the Australian industry; and
- ensuring that the industry is fully aware of Government innovation programs, particularly initiatives announced in *Investing for Growth*.

Information Technology

The IT aspects of this strategy focus on trial and demonstration projects in key strategic areas, which will provide a foundation for the industry to move towards fully integrated IT systems.

The Government and industry will work together to identify suitable trial and IT demonstration sites for projects identified by the industry and will explore the opportunities to promote the wide diffusion of IT within the industry.

A strategy will be put in place to ensure that the outcomes of a trial and demonstration program are actively promoted and widely dispersed throughout the industry.

Regulatory Reform

Building Regulation

The Commonwealth will pursue the future of the Australian Building Codes Board ("ABCB") with State and Territory governments with a view to reaching agreement on extending the life of the ABCB beyond 1999 to maintain the current momentum towards nationally consistent and international best practice building regulation.

Planning & Development Regulation

In accordance with Recommendation 29 of the Bell Report, a joint meeting of Planning, Housing and Local Government Ministers is proposed for mid-1998 to develop a reform strategy for development control procedures.

Exports

The Government will support the activities of Australian firms which are committed to capturing long term export opportunities. In particular, through government to government dialogue, the Government will continue to address market access issues in Asia and other markets targeted by the industry.

The Government will work with industry to examine the feasibility of establishing an industry-wide database to identify major overseas opportunities and help interested Australian companies to form consortia to respond to significant projects. The database will also provide relevant market information such as the legal and technical framework relevant to the project.

The industry-wide database will link the sector specific databases already in place throughout the industry. The Department of Industry, Science and Tourism ("DIST") will coordinate a study of existing databases and their use by industry.

Procurement and Project Delivery

Government and industry are considering:

- the role of tendering and contracts in facilitating procurement reform, particularly - pre-qualification methodology throughout the industry - contracting principles throughout the industry;
- single source solutions to meet total client needs for packaged construction services;
- methodologies for creating and managing cooperative business relationships such as alliance partnering and supply chain management;
- the role of information technology in facilitating industry relationships and processes;
- the impact of whole-of-life costs of buildings in investment decisions, which subsequently deliver beneficial energy efficiency, other environmental outcomes, and lower maintenance costs among other factors.

The Government and the National Building and Construction Committee will convene a focus group of purchasing practitioners from the public and private sectors to consider initiatives with sufficient commercial focus to be applied throughout the industry.

Workplace Issues

Training and Skills Development

As part of the consultation process, DIST will seek a broad range of views on these key issues from the

industry for consideration by NatBACC at its March 1998 meeting with a view to providing further advice to Government. This advice will be conveyed to the Minister for Employment, Education, Training and Youth Affairs.

Workplace Relations

NatBACC will examine the application of the workplace reforms in the building and construction industry and provide advice to both Government and industry on ongoing reform in the industry.

Environment

The Government and industry will consider the following issues:

- the means to achieve wider understanding of how environmentally responsible design, planning, building processes, building materials (including recyclable and recycled materials) and maintenance, and the resultant operating and energy efficiencies, can reduce whole-of-life costs;
- how these considerations can be more effectively factored into the commercial decision making process by clients: this issue will be considered by the focus group of public and private sector purchasing;
- practitioners which will examine new procurement models for the industry; and
- the widespread diffusion of the latest innovations in design, engineering, planning, building and maintenance throughout the industry: - a session focussing on this issue will be held at the major building and construction industry innovation forum to be held in May 1998.

WHY IS THE INDUSTRY IMPORTANT?

Property

The Australian construction industry is interdependent with the property sector, which marshals the funds for building activity and manages completed assets.

In 1997, the Australian property industry had a turnover in excess of \$101 billion - greater than the mining, vehicle, construction and primary industries combined.

Institutional investors manage more than \$51 billion of commercial property trusts. Many Australians with life insurance, superannuation or an investment in public unit trusts are part owners of many of the nation's major office buildings, shopping centres, hotels and even hospitals.

Over the next three years, more than \$13.6 billion will be spent on non-residential building. More than seventy per cent of this expenditure will be funded by the private sector.

Building and Construction

The building and construction industry encompasses a wide range of activity from the construction of residential

dwellings and urban development to commercial and industrial building and the infrastructure associated with air, sea and road transportation, telecommunications, mining and energy.

The industry is a vital element of the Australian economy and has a significant impact on the efficiency and productivity of other industries. It is an enabler of investment activity, both relying on and generating investment in the broader economy.

The industry makes one of the most significant contributions to the Australian economy in terms of GDP and employment of any of the service industry sectors. In 1996, the sector produced a turnover of \$43.5 billion. It is estimated that a ten per cent gain in efficiency in construction, excluding residential construction activity, could lead to a 2.5 per cent gain in GDP.

The Australian building and construction industry is extremely diverse: in the size of firms, type of activity undertaken, the range of skills and technology employed, capital intensity and export orientation.

The industry employs some 570,000 people, many of whom are specialist subcontractors. As a consequence, of the 138,000 businesses in the industry, most (some 77,000) are small to medium sized enterprises ("SMEs"), often family-owned and employing less than four people. In fact, sixty-five per cent of the companies in the industry employ two people or less. The majority of companies in the industry, some eighty-eight per cent, have an annual turnover of less than half a million dollars.

The larger companies rely on the subcontract system to pull together teams on a project-by-project basis, while a very few maintain permanent workforces: only one per cent of companies in the industry employ more than fifty people, and only 1.3 per cent have a turnover of \$20 million or more.

Building material manufacture is also characterised by the dominance of large firms. A small number of large publicly listed firms dominate the majority of the market. These companies are generally highly diversified multinationals, with subsidiaries or extensive experience in North America, Asia, Europe and the Pacific. They generate substantial revenue from offshore manufacturing.

Non-Residential Construction

The non-residential construction industry, including engineering construction, accounts for some sixty per cent of all building and construction activity. In 1995-96 there were around 57,000 businesses in the industry.

The industry undertakes a wide range of construction activity including commercial buildings, hotels and resorts, factories, roads, bridges, railways, resource development infrastructure, pipelines, electricity plants and networks, telecommunications networks, and water reticulation and sewerage systems.

It is estimated that in financial year 1996-97 the industry had a turnover of approximately \$28 billion, with the eight largest companies in the industry accounting for nearly 27 per cent of industry turnover.

Not including wages and salaries, which accounted

for around \$8.82 billion of the total value added, the industry purchased intermediate inputs worth in the order of \$14 to \$15 billion. These inputs included:

- electrical and electronic equipment (approximately \$1.92 billion);
- other property services, including hire and leasing of machinery and equipment, essential items in any medium to large scale construction project (slightly more than \$1.90 billion);
- structural and fabricated metals products (around \$1.73 billion) cement, lime and concrete slurry, plaster and other concrete products (approximately \$1.38 billion);
- road transport (approximately \$687 million); and
- mechanical repairs (around \$527.8 million).

Given this scale of input purchasing and the cyclical nature of industry activity, fluctuations in industry activity can have significant effects on total demand in a wide range of other industries.

Exports of building services now deliver \$400 million annually, and these exports are growing at a rate faster than many other industries. Australia exports some \$3.2 billion worth of building materials per annum, more than half to Asia. In addition, many larger Australian companies have established manufacturing operations overseas, particularly in South East Asia.

Residential Construction

The residential construction industry includes residential land development, home building and production of kit and transportable homes.

The home building industry is an important sector within the Australian economy. In 1996-97, private expenditure on new dwellings was \$15.6 billion. The Indicative Planning Council for the Housing Industry estimates that in 1997-98 dwelling commencements are expected to reach around 141,000. This represents an increase of around ten per cent on previous year construction levels.

The home building industry is highly regionalised with less than ten firms in the detached housing market operating in three or more States. A number of distinct market segments exist for detached housing, attached housing, alterations and additions, and kit and transportable homes. The industry is closely related to the land development and building materials industries. While there is a large number of small firms in the industry, market share based on housing value indicates that a small minority of volume builders and a group of medium sized firms have market dominance. The kit and transportable homes sector is a small but growing sector of the industry.

TRENDS INFLUENCING THE INDUSTRY'S FUTURE

Globalisation, advances in technology, and changes in the structure of the Australian economy are presenting new challenges to the industry. However, a number of

trends, at both the domestic and international levels, and the industry's ability to respond positively to them, have significant implications on its potential to take advantage of the opportunities these challenges will present. These trends include:

Globalisation

- Construction is becoming an increasingly global business, characterised by a trend towards large firms. Some commentators suggest that, globally, the industry is at the first stage of industrial formation and that in the not too distant future the global industry will be dominated by perhaps twenty to thirty large firms.
- Trade liberalisation and the consequent increased market access are providing more opportunities for Australian firms to go global. There is increasing overseas investment in and ownership of Australian construction companies and direct presence in Australia of overseas firms. Australian companies, on the other hand, are increasingly establishing an overseas presence, especially in the markets of the Asia-Pacific region, where they are gaining a well-deserved reputation for innovative design, materials and construction processes. The challenge for the Australian industry is to continue to position itself as a base for activity in the Asia-Pacific region.

Exports

- Economic and population growth, and increasing per capita income, in East and South Asia, the Middle East and Latin America are driving demand for housing and non-residential construction, with massive increases in demand for commercial buildings and hotels, apartments and condominiums, and large scale public sector housing projects.
- Urbanisation is increasing rapidly: since 1975, the proportion of the world's people living in cities has grown from 25 per cent to 40 per cent, with the United Nations estimating that by the year 2025 some 54 per cent of the world's population will live in cities. The pace of urbanisation in developing economies is creating massive demand for urban infrastructure - water, sewerage, energy, communications and transportation - and, in the higher growth developing economies, for hotels, major retail developments, resorts, industrial estates and factories. According to World Bank estimates, between now and 2004 in East Asia alone this rapid urbanisation will lead to demands for urban infrastructure worth up to \$US1.5 trillion and these demands cannot be met by domestic capacity.
- While the financial problems currently besetting a number of countries in the region will have a short to medium term impact on this timeframe, these economies will recover and return to strong rates of growth. The Australian industry needs to put in place a strategy for longer term involvement in the region to capture the opportunities arising from the latent demand for infrastructure and the anticipated

increase in market access arising from the restructuring of these economies as a consequence of responses to the current crisis.

- Exports of building and construction services have been growing rapidly, albeit from a low base, over the last ten years. The industry needs to build on this growth rate in order to capture the opportunities arising from the rapid growth in global trade and the opening up of international markets.
- The Australian industry is price competitive in comparison with other OECD countries. However, the changing demands of the market require the industry to look beyond price competitiveness alone to differentiate itself in the new global construction market that will develop into the new millennium.

Australian Market

- The continued integration of the property sector into capital markets will create a more liquid industry - no one yet knows whether this will increase cyclical volatility or assist to smooth out the industry's notorious reactions to demand side fluctuations.
- The demand for space is changing radically due to information technology, new management practices, efforts to separate front and back office functions, globalisation and declining work space ratios, among other factors.
- Obsolescence of an increasing portion of Australia's Post WWII building stock will create a major need and opportunity for retrofit activity.
- Australia's infrastructure is being expanded and rejuvenated, with a trend away from public sector provision to innovative private sector construction and/or provision, often through Build-Own-Operate ("BOO"), Build-Operate-Transfer ("BOT") and Build-Own-Operate-Transfer ("BOOT") projects. This is reflected in the decline of direct public sector construction activity from 24 per cent of construction activity in the mid-1970s to 14.6 per cent in 1996-97. Nonetheless the public sector remains an important client.
- Major resource projects are coming on stream with a consequent demand for roads and other infrastructure such as electricity, sewerage and water systems to serve these important export industries.
- The cultural paradigm of the brick veneer home on a quarter acre block in the suburbs is being effected by the trend towards medium and high density residential developments. This has provided an impetus to innovative design and construction solutions, for example in the conversion to residential accommodation of former industrial or office buildings.

Information Technology and Telecommunications

- Information technology and telecommunications are transforming businesses, including the building and construction industry, across the economy and the

world, enhancing their productivity and enabling them to compete in global markets.

- While some firms are increasingly using information technology as an important tool for improved competitiveness and efficiency (in areas such as design, project management, documentation, procurement, electronic commerce, and building operation), this is often restricted to either the larger players or those in consulting professions such as architects, engineers and quantity surveyors. The wide diffusion of IT within the industry remains a challenge.

Procurement and Project Delivery

- The industry has traditionally been adversarial, and characterised by a short term focus on planning and relationships which have been based around one-off projects rather than longer term consortia.
- Public and private sector clients are increasingly moving away from buying construction products to packaged construction services. To meet clients' preferences for a "seamless service" and "single source solutions", firms may need to form longer-term alliances to present a "virtual organisation" to clients. These changes to industry processes will be reinforced by advances in information technology.
- Governments are increasingly seeking to limit the extent of their investment in new infrastructure and to devolve purchasing decisions to individual agencies while retaining core principles of value for money and open and effective competition. Increased direct outsourcing of building and construction with less specialist in-house public sector expertise provide significant challenges and opportunities for the industry. Successful firms will respond to this changing environment with innovative, cost-effective solutions to meet public sector client needs.

Workplace Issues

- The industry's workforce is ageing and the number of new entrants being attracted to the industry is declining. Evolving industry structures and new technologies and processes are driving change in the workplace. There is an increasing demand for a multiskilled and learning oriented workforce.

Environment

- Voluntary codes, regulation, public opinion and client demand are stimulating increased focus on environmental sensitivity, ecological sustainability, and energy efficiency in many aspects of building, construction and operation. Increased focus on these issues is set to continue.

THE INDUSTRY IN THE FUTURE

"... firms in the industry face serious challenges in responding to new conditions, but even greater

difficulties if they continue to court business-as-usual. Companies emerging as the most successful are those who have learned to be innovative in their organisation and management of: people, markets, monies, materials and technology. Success comes to those who have learned to actively greet change, not passively meet it."

Dr David L Hawk, "Forming a New Industry: International Building Production"

The objective of this strategy is to assist the Australian building and construction industry to achieve its full potential. The overall goal is an innovative, leading edge, and environmentally sustainable industry, well integrated into the Asia/Pacific region and recognised as a global leader in the provision of internationally competitive building and construction services and products.

The following objectives have been identified as steps towards achieving this overall goal:

Innovation

That the industry has recognised and adopted innovation in all aspects of its activities as a means to increase its performance and competitiveness, with:

- wide diffusion of new processes and products throughout all levels of the industry, particularly SMEs; and
- a regulatory framework that actively facilitates and encourages the development of innovative practices.

Information Technology

That the industry is efficiently using IT as a tool to re-engineer processes within the industry with:

- wide uptake of information technology throughout all levels of the industry as an enabler of greater efficiency and competitiveness.

Regulatory Reform

That Australia has an international best practice regulatory system with low time and resource imposts on industry, that is also widely adopted throughout the region, with:

- Australia's performance based building code the subject of continuing close consultation between the industry and government;
- the minimal use of prescriptive standards; and
- planning regulations and approval processes harmonised to the maximum possible extent throughout Australia.

Exports

That the Australian industry is recognised as an innovative and competitive provider of design and building and services and related products tailored to the needs of individual clients and markets:

- capturing opportunities associated with major projects and infrastructure developments, particularly those that will continue to emerge in the Asia Pacific region;
- with companies leading access into overseas markets working cooperatively with other competitive Australian suppliers of services and materials to provide construction solutions for clients which maximise Australian industry involvement;
- with specialist service providers enjoying a high profile in overseas markets; and
- a reputation for being capable of delivering environmentally responsible and energy efficient building developments.

Procurement and Project Delivery

That commercially focussed procurement practices are in place which encourage long term, strategically focussed supply relationships, leading to:

- greater integration and financial strength and stability in the industry, allowing it to respond to emerging opportunities both in Australia and overseas;
- development of “seamless” and “virtual” organisations;
- more innovative high quality, cost-efficient building outcomes that recognise whole-of-life costs; and
- consistency, where possible, across the public and private sectors.

Workplace Issues

That participants in the industry operate in a flexible and professional environment, with a learning oriented workforce and effective supplies of well-trained and multiskilled people at management, technical and operational levels:

- that all parties are committed to ongoing development and training under a nationally consistent training framework, which:
 - streamlines training and skills recognition arrangements; and
 - underpins a national, quality assured system of vocational education and training.

That a workplace culture which encourages more direct and cooperative relationships between employers and employees is in place.

Environment

That the industry is recognised as having the capacity to design, construct and operate buildings in a manner which reduces the impact on the environment and with:

- wide understanding of the potential savings in lifecycle costs of energy efficient design and processes.

PROPOSED ACTION AGENDA FOR 1998

The strategy proposes a number of action items to be undertaken in 1998 to address issues in the following areas:

- Innovation and Research
- Information Technology
- Regulatory Reform
 - Building Regulation
 - Planning and Development Regulation
- Exports
- Procurement and Project Delivery
- Workplace Issues
 - Training and Skills Development
 - Workplace Relations
- Environment

It should be noted that many of the action items will themselves generate proposals for further action, to be undertaken either in 1998, or later years, as part of a rolling program to reach goals established by industry and Government in partnership.

Innovation and Research

Innovation is a key element to improving the performance and competitiveness of the building and construction industry. The design, development, commercialisation and effective diffusion of new building products, systems and services are key drivers for the growth of the industry.

The building and construction industry involves a multitude of organisations from a range of different industrial sectors, working together in coalitions on project-specific tasks. These functions involve design, engineering, supply and integration, erection and installation of a diverse array of materials, components and increasingly complex technical systems. The project-based nature of the work implies that firms have to manage networks of highly complex innovation interfaces. Competitiveness rarely depends solely on a single firm, but rather on the efficient functioning of the entire innovation network.

The industry is characterised by incremental innovation which is delivered on-site through firms addressing problems that need to be solved. Major innovations are often generated by changes to materials and equipment arising from research and development (“R&D”) or significant improvements to design, engineering and assembly methods.

The construction industry potentially has one of the largest long term flow-on effects to the rest of the economy from improvements in efficiency. Through innovation the industry can improve its efficiency and its ability to offer effective building solutions tailored to a client’s needs.

The Government recognises the need to increase funding for R&D, the commercialisation of research outputs and the rate of uptake of leading-edge technology by Australian industry. In its industry plan Investing for Growth the Government has committed significantly increased funds for R&D to provide strong incentives for

industry in Australia to fully embrace innovation.

The construction industry is innovative by nature, but this innovation is often seen on a project by project basis rather than as an ongoing process. As a result the innovative nature of the industry is not widely recognised and the contribution of innovation to competitiveness is neither extensively understood nor utilised by many in the industry.

Action

The Government will promote the innovation measures in Investing for Growth widely throughout the building and construction industry. These measures are designed to:

- encourage increased R&D by Australian building and construction businesses;
- improve venture capital for the commercialisation of business R&D; and
- improve access to new technology for Australian industry.

The Government is working with the building and construction industry to conduct a major innovation forum for the industry. The forum, to be held in May, will focus on:

- showcasing the innovative nature of the industry by highlighting recent developments in design, products and processes;
- through workshops consider issues such as identifying the impediments and constraints to the diffusion of technology throughout the industry;
- improving the links between the industry, universities and public sector research organisations;
- how innovation can lead to environmentally sustainable design, planning, construction and maintenance outcomes; and how a performance based building code will increase opportunities for innovation;
- promoting international science and technology collaboration and increased attraction of leading-edge technologies to the Australian industry; and
- ensuring that the industry is fully aware of Government innovation programs, particularly initiatives announced in Investing for Growth.

The Government and NatBACC will consider the outcomes of the issues based workshops to examine where further action needs to be undertaken.

Information Technology

Information Technology (“IT”) is the vehicle to accelerate the effective diffusion of crucial information throughout the economy, and plays a key role in enabling businesses in all industries across the economy to raise their productivity and compete internationally. Effective

information management and the elimination of unnecessary processes are of fundamental importance to the Australian building and construction industry in its drive to increase efficiencies and remain internationally competitive.

The importance of raising industry awareness of the benefits of IT is particularly relevant for the Australian construction industry, where the benefits have primarily been recognised by the larger construction companies, engineering services contractors and professional groups such as architects, engineers and quantity surveyors. Many small and medium sized enterprises, which constitute a large proportion of the industry, have not yet recognised the potential of IT to improve their efficiency and competitiveness.

The Government’s plan for Australian industry, Investing for Growth, recognises the need to raise awareness of the benefits of IT and the importance of being online. While market forces will be the driving force for the take-up of IT in the building and construction industry, the Government, by providing an engine for changing attitudes towards the take-up of IT, will play a leading role in promoting industry-wide adoption of IT. The business online initiatives announced in Investing for Growth will establish training and demonstration centres to provide access for firms, particularly small business, to the latest online technologies.

Information technology is a key tool in re-engineering many processes in the building and construction industry. The industry is moving towards IT based project management systems which integrate elements such as design and specification, data and document exchange, and tendering and procurement. Project management systems will operate from the planning and design stage through to completion and subsequent transfer of relevant information to building management and maintenance programs:

- project information will be accessible to all those within a project who need specific information with gateways managed by principals in the project;
- there will be increasing pressure on small to medium sized companies associated with a project to go online in order to develop an interface with the principal companies delivering the project; and
- suppliers of building products will provide descriptive, dimensional, operational and performance criteria information which will be integrated into the project database.

The Department of Industry, Science and Tourism convened a construction industry IT focus group in December 1997 to consider a proposal to establish a trial and demonstration program aimed at promoting the wider application of IT in the industry. The group canvassed a range of projects to move the industry forward:

- the use of IT in emerging project delivery models such as “Alliance Partnering”:

information flow will be the key to the successful application of alliance partnering - by using IT, companies working on a project can create a virtual organisation for the life of a project;

- an examination of the potential for efficiency improvements through application of online communication to existing building networks: many building firms, particularly smaller companies, work in an established business network where they primarily deal with the same group of architects, engineers, other building professionals and product and service suppliers - trialing online technologies with such a group that is not already deploying these technologies and monitoring any efficiency dividends, may provide a useful case study for the industry; and
- identifying the elements of a building management and maintenance program which are (or can be) developed as part of the project management system and establishing relationships between the project manager and the client which will lead to the subsequent development and transfer of this information: - relevant data includes engineering, design, building and planning consent documentation - a key to the project would be to resolve any intellectual property and liability issues and to identify how this information can contribute to lower whole-of-life costs for building owners.

Action

The IT aspects of this strategy focus on trial and demonstration projects in key strategic areas, which will provide a foundation for the industry to move towards fully integrated IT systems.

The Government and industry will work together to identify suitable trial and IT demonstration sites for projects identified by the industry and will explore the opportunities to promote the wide diffusion of IT within the industry.

A strategy will be put in place to ensure that the outcomes of a trial and demonstration program are actively promoted and widely dispersed throughout the industry.

Regulatory Reform

Within Australia, the Government has been actively working to limit the cost, time and resource burdens placed on business by conflicting regulatory regimes across and within jurisdictions. Regulatory reform in the building sector is aimed at achieving a nationally consistent framework with a view to:

- uniformity in building regulation;
- minimisation of technical variations between jurisdictions;
- more efficient and simplified regulatory

systems; and

- encouragement of innovation in building.

The Government's response to the recommendations of the Small Business Deregulation Task Force (Bell Report, 1996) opened a new phase in the Government's relationship with small business. The Government's response, *More Time for Business*, outlined a reform agenda targeting regulation reform and a tangible reduction in the compliance burden for small business.

As a result of the Bell Report, the Government is pursuing initiatives for the building and construction industry. These include:

- the development of a framework which will provide a nationally consistent approach to regulation in the residential building sector and continued efforts to reduce variations in technical requirements for building between States and Territories to assist the formation of a national market;
- the introduction of private certification of building approvals to reduce processing times;
- the development of an improved national building products certification scheme; and
- a reform strategy for concurrence and referral procedures.

As part of the Investing for Growth strategy, the Government will continue working towards removing standards and conformance impediments to trade with APEC economies, as part of a collective effort towards the harmonisation of regulations and standards within the region and internationally. It is also recognised that as well as presenting impediments to international trade, excessively prescriptive standards and conformance regimes can limit the opportunities for increased efficiency and competitiveness in the domestic market.

Building Regulation

Significant advances have been made in moving towards nationally consistent and international best practice building regulation. It is vital that the momentum generated thus far is built upon.

The Australian Building Codes Board ("ABCB") has delivered the first fully performance-based Building Code of Australia (BCA). A significant reduction has already been achieved in State/Territory variations to the technical requirements of the Code, reducing the resource burden on industry and encouraging the development of a national market. The Code provides least cost technical standards for health, safety and amenity. A performance-based approach to regulation will provide opportunities for innovative firms to develop new products, systems and practices.

The ABCB has also developed a more effective national products and systems certification scheme, consistent with the recommendations of the Bell Report, which provides State and Territory Governments, local

government, building professionals, designers and builders with a reliable source of recognition of compliance of products or systems. The new scheme significantly reduces leadtimes for applications for certification, with resultant savings to industry. The scheme will assist in the introduction of innovative products and systems in terms of the performance-based BCA.

The ABCB's current term expires in 1999. Commonwealth, State and Territory Ministers with responsibility for building regulation have already agreed in principle that some form of Inter-Government Agreement that continues the process is desirable beyond this period. Ministers have agreed to consider the future of the Inter-Government Agreement establishing the ABCB in the first half of 1998. This will provide an opportunity to also review the coverage of the ABCB in terms of building regulation.

Action

The Commonwealth will pursue the future of the ABCB with State and Territory governments with a view to reaching agreement on extending the life of the ABCB for a further five years beyond 1999 to maintain the current momentum toward nationally consistent and international best practice building regulation.

Planning and Development Regulation

In *More Time for Business*, the Government concurred with the findings of the Small Business Deregulation Task Force (Recommendation 29) on the need to develop a strategy to reform concurrence and referral procedures in building and development and devolve dispute resolution mechanisms and delegate decision making to the lowest level practical.

The Government acknowledges the progress made to date by State and Territory Governments in reforming their planning and development regulations. However, considerable work remains to be done. State and Territory planning systems have, in the main, been developed in isolation of each other and can be subject to varied and inconsistent interpretation by Australia's more than seven hundred local government authorities. Approval processes are fraught with delays and appeals to the courts and tribunals. Consequently, holding costs and the uncertainty of processes may result in some projects not being commercially viable.

If Australia is to remain competitive in the global economy, attract investment and create new job opportunities for Australians, all spheres of government and the building and development industry need to work together to develop more harmonised, best practice development control systems throughout Australia.

In preparing the reform agenda, the Government has actively sought the views of those that are affected by regulation. The high level of consultation with business and government has typified the Government's approach to its reform strategy.

Action

In accordance with Recommendation 29 of the Bell Report, a joint meeting of Planning, Housing and Local Government Ministers is proposed for mid 1998 to develop a reform strategy for development and control procedures.

Exports

Building and construction is increasingly becoming a global business. A number of Australian building and construction firms have established themselves in overseas markets, however many firms are yet to venture into, and capitalise on, overseas opportunities. Many firms are yet to consider extending their field of operations beyond the domestic market. However, given the cyclical nature of the domestic market, firms which develop export markets will be well placed to weather future cyclical downturns.

Australian firms must continue to develop a strong export culture if they are to increase their share of offshore opportunities. Currently exports are running at a growth rate of 14 per cent per annum from a low base over the past decade. Although this is a significant achievement for industry, given the growth in regional and global trade in services, the challenge for the industry is to maintain and build on this rate of growth, based on innovation and international competitiveness.

To compete in overseas markets, particularly for large projects, Australian companies need to become more skilled in the timely formation of alliances and consortia. The provision of information through the database proposed below would provide part of the framework to meet this imperative.

The Government is facilitating access to overseas markets for Australian firms, especially in the Asian region. Through the relationships built at government to government level, a number of market access issues are being addressed. Memoranda of Understanding ("MOU") have been established with Japan, China and Indonesia. These MOUs provide a framework to foster relationships at the Government to Government level. By working with industry, issues addressed through this framework include:

- market information;
- tariff and non-tariff barriers including regulations, standards and compliance systems;
- promoting Australian capabilities; and
- stimulating the development of bilateral industry collaboration.

Action

The Government will support the activities of Australian firms which are committed to capturing long term export opportunities. In particular, through government to government dialogue, the Government will continue to address market access issues in Asia and other markets targeted by the industry.

The Government will work with industry to examine the feasibility of establishing an industry-wide database to identify major overseas opportunities and help interested Australian companies to form consortia to respond to

significant projects. The database would also provide relevant market information such as the legal and technical framework relevant to the project.

The industry-wide database would link the sector specific databases already in place throughout the industry. The Department of Industry, Science and Tourism will coordinate a study of existing databases and their use by industry.

Procurement and Project Delivery

Better procurement methods and more innovative approaches to meeting the total needs of clients offer scope for greater efficiencies and improved building outcomes. Clients are increasingly seeking packaged construction services, which deliver specified quality outcomes, on time and within budget. This presents a challenge to the building and construction industry to provide innovative “single source” solutions that meet client needs. Companies that can present an innovative, fully integrated service to clients will have a competitive advantage. Cooperative business relationships, such as “alliance partnering”, are emerging in response to this demand. These trends will need to be reinforced by improvements to communication between all parties involved in a project, such as the improved application of information technology and the development of legal frameworks which reduce contract dispute and facilitate the formation of alliances.

The Australian Procurement and Construction Council (“APCC”) document Construct Australia has contributed to debate on improving procurement and project delivery methods across the industry. The APCC provides Commonwealth and State Governments with policy advice on procurement and construction matters.

Action

Government and industry are considering:

- the role of tendering and contracts in facilitating procurement reform, particularly:
 - pre-qualification methodology throughout the industry;
 - contracting principles throughout the industry;
- the development of single source solutions to meet total client needs for packaged construction services;
- methodologies for creating and managing cooperative business relationships such as alliance partnering and supply chain management;
- the role of information technology in facilitating industry relationships and processes;
- the impact of whole-of-life costs of buildings in investment decisions, which subsequently deliver beneficial energy efficiency, other environmental outcomes, and lower maintenance costs among other factors.

The Government and NatBACC will convene a focus group of purchasing practitioners from the public

and private sectors to consider initiatives with sufficient commercial focus to be applied throughout the industry.

Workplace Issues

Training and Skills Development

Changing industry structures and new technologies and processes are driving change in the workplace, including the need for greater flexibility in acquiring and using new sets of skills. The industry’s workforce is ageing and the number of new entrants being attracted to the industry is declining. The industry requires a more learning oriented workforce and effective supplies of well-trained and multiskilled people at management, technical and operational levels.

Training and skills development has been identified by the industry as vital to its future success. Industry has identified a range of issues for attention, including:

- national coordination of vocational training and skills curricula and systems;
- national coordination of skills accreditation arrangements;
- attracting, enhancing and retaining a skilled workforce, and appropriate training wage arrangements;
- greater consideration of competence based training; and
- improved management and financial training to complement the technical and professional skills of industry participants.

Action

As part of the consultation process, DIST will seek a broad range of views on these key issues from the industry for consideration by NatBACC at its March 1998 meeting with a view to providing further advice to Government. This advice will be conveyed to the Minister for Employment, Education, Training and Youth Affairs.

Workplace Relations

The Australian building and construction industry is relatively efficient compared to other Australian industries. However, there is room for improvement in workplace relations in the industry to ensure that it is able to achieve its full potential and become more competitive in the global economy. The industry has the capacity to increase its productivity, enhance career opportunities for workers, ensure workers are world class in applying technology and to provide greater certainty in the costs of production. Improved workplace relations between management and workers are critical to the industry achieving these objectives.

The Government’s *Workplace Relations Act* provides a welcome platform for the industry to develop and undertake essential changes to improve the workplace relations environment, increase the efficiency of the Industry so that consequential benefits in productivity and efficiency flow on to the economy, property developers, owners, managers, workers and purchasers.

The *Workplace Relations Act* emphasises the importance of relationships at the workplace and enterprise level, with primary responsibility for industrial relations and agreement resting with employers and employees at that level. The *Act* provides a framework for cooperative workplace relations which promotes the economic prosperity and welfare of Australia.

NatBACC considers that the building and construction industry needs to be fully informed of the significant improvements and changes the Government has made to the legislative framework for workplace relations and encouraged to take advantage of the legislative reforms.

The Government has developed and circulated a plain English guide to the *Workplace Relations Act*, in handbook form, aimed principally at subcontractors who make up the majority of employers in the Industry. The Guide provides advice to employers in the industry in the day to day management of their workplace relations.

The Government has also been actively involved in the formulation and endorsement of a new National Code of Practice for the Construction Industry which seeks to establish standards of behaviour to apply on Government construction sites, particularly, but not exclusively, on workplace relations issues.

Action

NatBACC will examine the application of the workplace reforms in the building and construction industry and provide advice to both Government and industry on ongoing reform in the industry.

Environment

In November 1997 the Prime Minister released *Safeguarding the Future: Australia's Response to Climate Change*. A number of initiatives are included in this statement which aim to improve the performance of industries, such as building and construction, to develop integrated, consistent and effective minimum standards to lower Australia's greenhouse emissions.

Demonstration projects and the development of best practice guides will be undertaken to promote energy efficient services and products in housing design, redevelopment and use. Also, voluntary minimum energy performance standards will be developed for new commercial building work on the basis of energy efficient benchmarks. These initiatives will bring together all levels of government and industry in broadly based partnerships to develop strategies aimed at lowering greenhouse emissions. The integration of energy efficiency rating schemes into the approval processes for new building work will provide greater consumer choice and encourage industry development through the introduction of more innovative products.

The building and construction industry recognises the importance of ecologically sustainable development and the need to factor environmental considerations into the building and construction process. Design is a critical element in delivering environmentally sustainable

outcomes. The world-wide momentum for ecologically sustainable development and reduction in greenhouse gas emissions will encourage environmentally responsible and sustainable construction products and services.

Not only will energy efficient technologies in building reduce greenhouse emissions but they have the potential to lower whole-of-life costs for consumers. The adoption of new technologies in building, such as solar power, can lead to reductions in the average level of pollution emissions. Home owners and businesses adopting these technologies can expect to save considerable money on annual power bills.

Better environmental management practices can also result in long-term savings to business by reduction in waste generation. Construction waste is expensive to transport and dispose of, so waste avoidance and minimisation can benefit a firm's project budget as well as helping to achieve national waste reduction targets.

Numerous benefits result from waste minimisation in construction. Much of the waste generated by a construction project is recoverable. Valuable materials, such as bricks and metal, can be reclaimed, while others such as concrete can be recycled. Reduction in waste going to landfill is a saving both in cost to the contractor and to the community.

Australian companies have already engaged in programs which pioneer best practice environmental outcomes in the area of waste minimisation. The Australian and New Zealand Environment and Conservation Council established the WasteWise Construction Program to help achieve national waste reduction targets in the construction industry. Five leading construction companies have already signed voluntary agreements to establish best practice in waste reduction.

Action

The Government and industry will consider the following issues:

- the means to achieve wider understanding of how environmentally responsible design, planning, building processes, building materials (including recyclable and recycled materials) and maintenance, and the resultant operating and energy efficiencies, can reduce whole-of-life costs;
- how these considerations can be more effectively factored into the commercial decision making process by clients: this issue will be considered by the focus group of public and private sector purchasing practitioners which will examine new procurement models for the industry; and
- the widespread diffusion of the latest innovations in design, engineering, planning, building and maintenance throughout the industry: - a session focussing on this issue will be held at the major building and construction industry innovation forum to be held in May 1998.