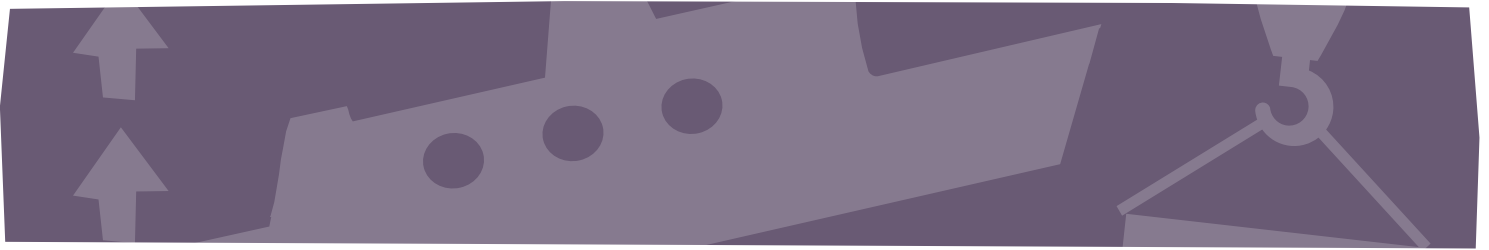


# THE COMMON SENSE GUIDE TO CHANNEL DEEPENING

2008





## Did you know over 97% of Australia's international trade is carried by ships?

As we're an island continent this shouldn't be so startling yet it's easily overlooked – and it also seems forgotten that 'trade' means *everything* we buy from overseas and everything we sell. Whenever you choose an item that's made in China or New Zealand or Germany or the US, the chances are high that it's arrived here by ship. And when you read of increasing wine sales to the UK, or dairy products to Japan, or wheat to India or grapes to the Middle East, those goods are being carried by sea, in the ships that call at the Port of Melbourne.

It is the sale of those exports – and the process of producing them – that puts the money in Victorians' pockets that enables us to buy the imported goods we consume. Some like to suggest that trade is counter-productive and that Australia should aim for some kind of self-sufficiency. Realistically, there's no way either exporting or importing can or will cease or reduce in any meaningful way, when local population and world trade continues to grow. In the 2006 census 5,205,200 people called Victoria home; by 2020 another half-a-million will have been added.

Put simply, we're buying more, we're selling more, and there are more of us doing it.

So if we can agree that the trade task is not likely to shrink – instead the opposite will occur – what is the best way to deal with it?

## Size does matter

Remember when small cars were small? Today's Toyota Corolla is almost as big as the first Holden Commodore, and it's much the same with ships. Melbourne is dredging to accommodate ships of a size that are now the workhorses of global shipping, carrying 4,000-6,000 TEU (twenty-foot equivalent units, or standard containers). In effect these are the Toyota Corollas of shipping. When international containerisation first began in Australia in 1969, ships were about 1,000 TEU. Since that time ships have become progressively larger, not only because of trade demands but because of the same rule that applies to most things: economies of scale. The largest container ships have doubled in size in just the last ten years.

So 4,000-6,000 TEU is now a modest size – even though it's the largest currently envisaged for Australian trades. The main focus elsewhere is on ships more than double this capacity, of 10,000-12,000 TEU, and there are vessels of 15,000 TEU in service and ones of 18,000 TEU planned. Volumes in Australian trades will probably never support the use of such genuine giants here. However, their existence does put into perspective Melbourne's position in the global port pecking order: we are not at the forefront; we are merely trying to maintain station in global shipping networks.

Statistics tell the story: in 1900, 4,009 vessels visited the Port of Melbourne carrying 3,406,000 tonnes – or an average of 849.58 tonnes per vessel. In 2007-08, the port hosted 3,432 vessels carrying 70,900,000 tonnes – an average of 20,658.50 tonnes per vessel. Fewer but larger ships – and not just container ships but also tankers, bulk carriers, vehicle carriers and general cargo ships.

Melbourne is this country's busiest container port because this is where the most containerised cargo is, generated through demand for imported goods and production of exports for world markets. The Port of Melbourne's catchment is the whole of South Eastern Australia, including southern NSW, South Australia and especially Tasmania. It's a chicken-and-egg situation – ships call here because this is where the cargo is, and the cargo is here because there are ships available to carry it. Melbourne has more of that cargo and more of those ships calling.

There is a kind of mutual dependency, but this relationship fails if one side is unable to keep its part of the bargain. If shallow channels restrict access, shipping services will be comprised – this is happening now, at an accelerating rate. If the range of shipping services is incomplete or insufficient, the importers and exporters of cargo will look elsewhere. Ports and their surrounding communities in Europe, Asia, North and South America have found this, to their cost.

In terms of importance, channel deepening also has very little to do with keeping up with the latest in 'giant' container ships or Melbourne's status as Australia's biggest container port. It's about the priority of keeping Melbourne, Victoria and South Eastern Australia's freight links open and available to the world.

## Alternatives don't stack up

As anyone who's ever flown to the major activity centres of the world will know, Melbourne's a long way from everywhere. Travel and transport can be expensive propositions. Our connections with the world need to be the best they can be, and that means, for imports and exports, the most efficient and cost effective routes pinpointing the centre of local supply and demand.

Having a major port at the front doorstep of Victoria is not just logical. The volumes involved in our trade simply can't be handled by other transport modes. If the cargo was shifted to other ports such as Adelaide, Brisbane or Darwin, and road or rail then used to connect with Melbourne, costs and congestion would skyrocket. For example, if the load of just one of the largest ships that link Victoria with Asia was to be handled elsewhere up to *thirty extra* connecting trains could be required. Yet the port of Melbourne currently handles more than a dozen Asian trade ships every week. In total some 2,200,000 containers are now shipped into and out of Melbourne each year – more than 42,300 a week.

Other Australian container ports can't accommodate Melbourne's freight flows, and nor could sometimes-suggested alternatives such as Portland or Geelong, which have their own physical constraints. The sheer volumes are such that Hastings – identified as Victoria's *next* container port – will be needed to handle the overflow when Melbourne reaches full capacity. It will not be a replacement but an addition. And the provision of road, rail and wharf infrastructure there will cost billions of dollars – a cost that nevertheless will have to be met to service Victoria's economic wellbeing, just as channel deepening is now.



## Dredging is no novelty

Well-meaning people are worried about the effects of dredging. But dredging of the River Yarra and Port Phillip Bay has been happening regularly for over one hundred years, yet the Bay's recent health has been the best ever measured.

Almost all ports require regular maintenance dredging of some kind as natural cycles and human activity cause waterways to become shallower. Until the mid 1990s the Port of Melbourne had its own dredging equipment and specialist personnel employed year-round, but the then government restructured the port management and a policy of hiring contractors when needed was adopted. Perhaps that's why Melburnians seem no longer familiar with, and some seem frightened by, a normal port function and the equipment and processes it involves.

The current Channel Deepening Project involves capital dredging, in order to make shipping channels permanently deeper for the larger vessels calling. Capital dredging has been undertaken in Port Phillip Bay and the River Yarra six times since 1900.

These days it is intricately planned, internationally benchmarked and intensively monitored, just as it is in other major ports of the world such as Shanghai, Antwerp, New York, Hamburg, Auckland, Rotterdam, Dubai, Los Angeles and Hong Kong.

## In good hands

The company undertaking Melbourne's channel deepening, Boskalis – or Royal Boskalis Westminster to give the company its full name – was founded by a group of Dutch families in 1910 in Sliedrecht, 'the home of dredging'. A leading participant in The Netherlands' famous Zuyder Zee and Delta projects, in which the low-lying country was saved from the ravages of the North Sea by coastal protection and land reclamation, Boskalis was already at work in Australia by the 1950s and has worked here ever since.

Boskalis is no environmental vandal or gung-ho contractor; it is one of the world's leading specialist dredging companies with an international reputation for successful completion of locally sensitive and technically-challenging projects. As well as Melbourne, Boskalis is currently engaged in major works such as Rotterdam's massive Second Maasvlakte project and the expansion of the Port of Le Havre.

In Australia Boskalis recently won a contract for the dredging and associated work for Newcastle's new export coal terminal, under development by the BHP Billiton-led Newcastle Coal Infrastructure Group. Channel deepening work in Melbourne is being undertaken through an alliance arrangement with the Port of Melbourne Corporation, through which specific methods and unique solutions have been developed to meet operational, technical and environmental requirements.

In short, the best people have been hired for the job and are doing it.



## Value for money?

Much has been made of the cost of the Channel Deepening Project, set to be \$969 million by completion in 2010. Although the Government is making a financial contribution of \$150 million, the remainder of the cost is being borne by port customers.

In an era of user pays, the cost of dredging will be recovered through a levy on all cargo that passes through the port – and by extra charges for ships. The bigger (and deeper) ships bear the greatest burden. Notwithstanding, the Port of Melbourne will still have some of the nation's lowest charges.

Rather than focus on the up-front expense, it's more pertinent to consider the cost of *not* deepening our shipping channels. Any restraint on trade has a real and opportunity cost.

Real costs are those that arise from having to divert imports and exports to other harbours, or transport freight hundreds of extra kilometres when, with one obvious handicap, there's a perfectly good port here. Already shipping companies estimate that a container ship unable to take a full load into or out of Melbourne suffers a potential loss of up to \$400,000 per visit.

Opportunity costs are harder to quantify, but begin to add up every time a manufacturer or distributor decides Queensland is a better place to base their activities because the Port of Brisbane has no restrictions on access. Over time businesses will drift to the most convenient, cost-effective location – meaning a loss of economic activity and community wealth for Victoria.

Last year trade through the port of Melbourne was valued at over \$75 billion, or \$142,000 a minute. Exports worth \$90 million leave the port every day. Clearly that's not all at risk from inadequate channel depth, but failure to address such a well-known inadequacy sends the wrong message to the world.

## Will deepening the shipping channel mean more trucks?

The freight task, both domestic and international, is growing. Channel deepening does not bring more trucks. Deepening the shipping channel is aimed at maintaining access for the country's largest port.

Landside of the port will need to work efficiently to deliver and pick up containers due to trade growth, not channel deepening.

This is why the Victorian and Australian Governments are investing in improvements to rail and road connections to the Port. The development of intermodal hubs attached to the rail network, use of higher productivity vehicles, increasing two-way loading of trucks and working during off-peak periods (night deliveries) are part of the improvements.

Channel deepening is one part of the picture of infrastructure and operational improvements in the Port precinct and broader transport network to service trade growth.

## In a nutshell

The Port of Melbourne exists to service the trading and consumption needs of millions of people, needs that continue to grow every year. By far the most efficient way of moving imports and exports is by ship, and international trends are towards bigger vessels that generate the economies of scale that keep costs down. We in Victoria do not dictate these trends and may prefer otherwise, but we cannot afford to be left behind.

The current Channel Deepening Project is the latest in an evolutionary series of works necessary to keep Victoria's access to the world as open and inexpensive as possible. Today's dredging is subject to the greatest scrutiny ever afforded such work and while there will undoubtedly be short-term effects on the local environment, research, history and experience tell us recovery will occur.

There should be nothing controversial or contentious about improving access to a port in which billions of dollars is already invested and through which the highest percentage of Australia's containerised trade passes. It's just common sense.