DBCT PROJECT

BBI (DBCT) Management Pty Ltd

4th Annual BULK MATERIALS HANDLING CONFERENCE

Excavation and civil works for the new Rail Receival Station

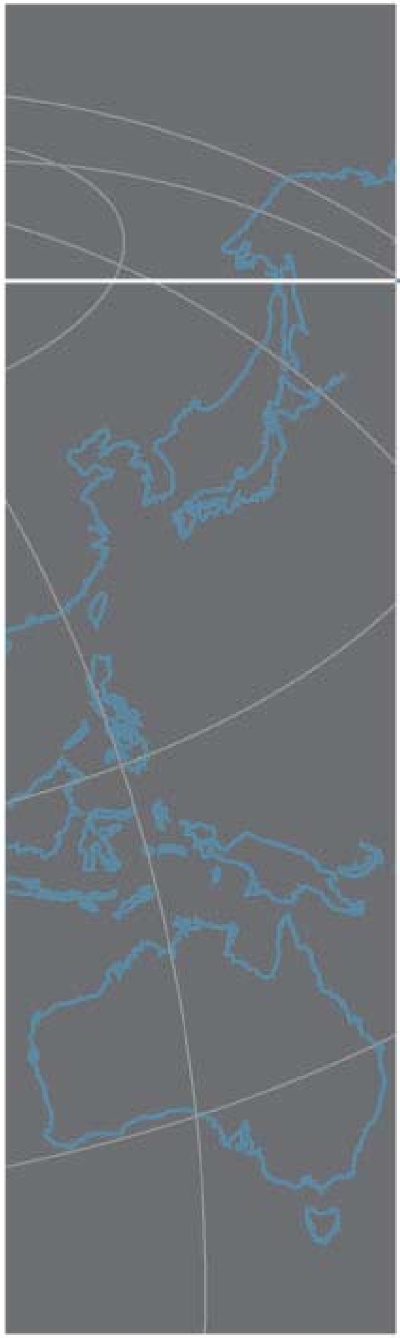
Case Study:

Boosting DBCT Capacity to 68 Mtpa by end 2007 and up to 85 Mtpa by end 2008

BABCOCK & BROWN INFRASTRUCTURE (DBCT)

Brisbane

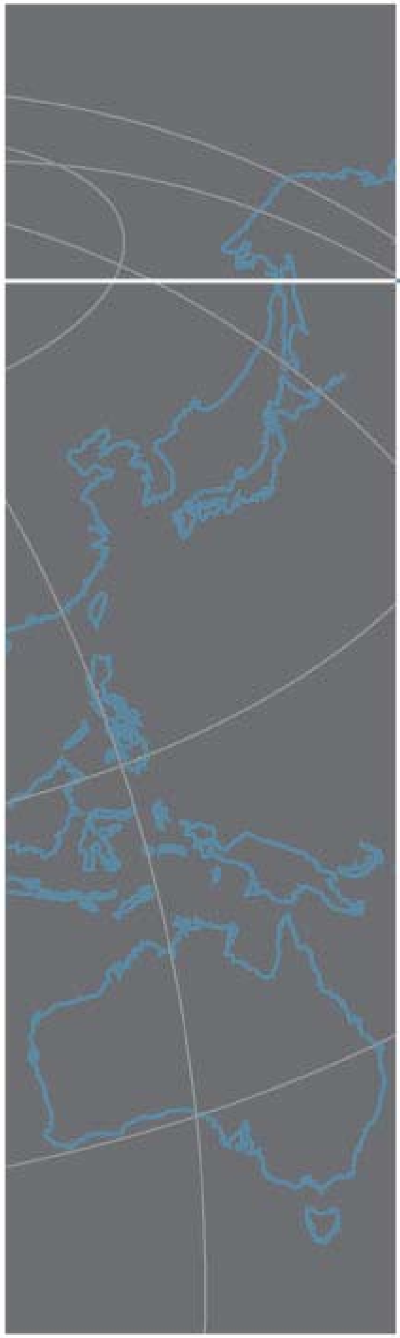
6-8 June 2006



BABCOCK & BROWN
INFRASTRUCTURE (DBCT)

Agenda

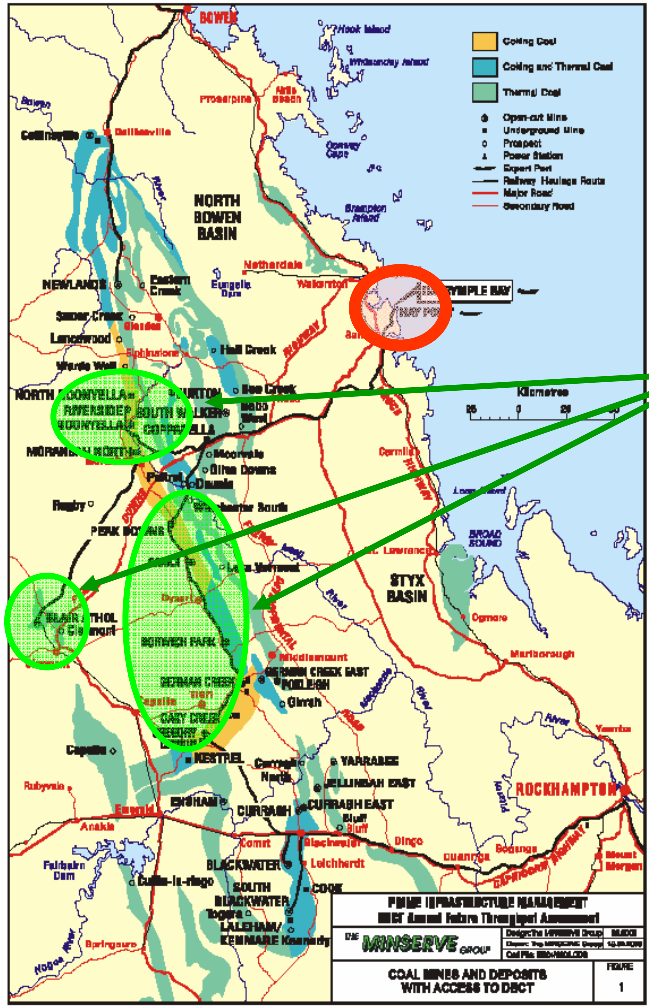
• Introduction	Eric Kolatchew
• An overview of DBCT	Greg Smith
• Issues of port capacity & how this is presently managed	Greg Smith
• The DBCT Expansion Program	Eric Kolatchew
• The Capital Efficiency of the DBCT Project	Ross Parslow
• Future benefits of the expansion for the Bowen Basin supply chain & its major customers	Greg Smith



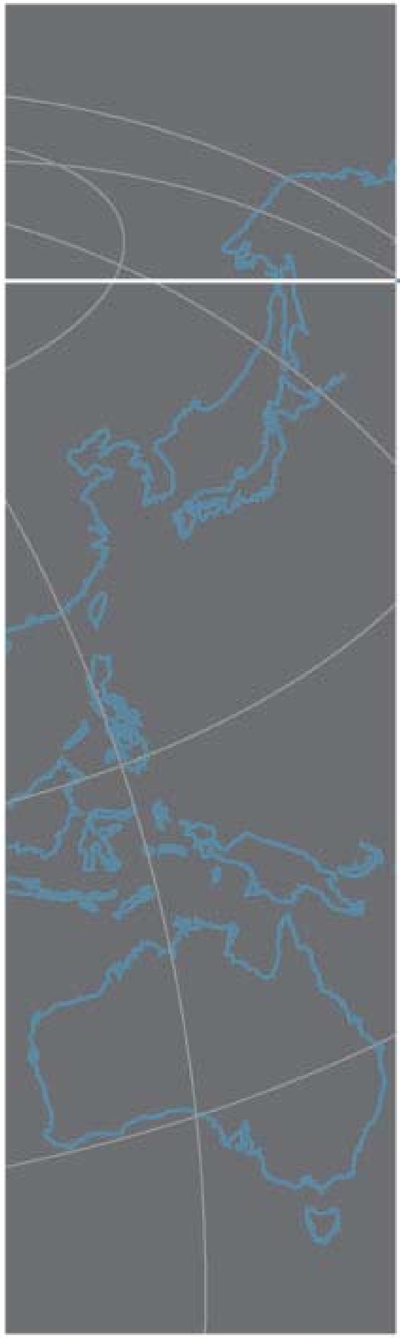
Introduction

- DBCT forms part of the Goonyella coal chain, a unique and complex bulk handling system, often inappropriately compared to the Hunter Valley or Blackwater coal chains.
- Increasing demand for capacity has stretched this coal supply chain to its current limits. Expansion of the existing infrastructure is now required to meet projected future demand.
- However, operational methodologies and the expansion project have been wrongly compared to other competing ports in terms of efficiency and cost.
- This presentation seeks to clarify several pertinent issues by providing factual information about the terminal's existing operation, and the need for supply chain expansion. It also presents a balanced approach to assessing capital efficiency of competing port expansions.
- Because of this complexity, I will be joined by two colleagues – Greg Smith, General Manager Operations for BBI (DBCT) and Ross Parslow, Principal with Connell Hatch, who has been doing some vital analysis and comparison work for us in relation to port expansion increments and benchmarking.

An Overview of DBCT



- Established in 1983 by the Queensland Government
- In September 2001, a Babcock & Brown consortium won a 99 year lease from the government – declared service
- Became Prime Infrastructure's foundation asset (since changed name to BBI)
- Currently DBCT services 11 mines with 2 new mines starting 2nd half 2006
- 3 different coal types – Coking, Thermal and PCI
- Up to 55 different coal blends
- Servicing multiple mine locations in a multi-user terminal operation
- Terminal Operations contracted to a 3rd party for daily operations
- Operator responsible for coordinating railings to avoid stockyard congestion
- Common rail system with 21 "trains" of 122 wagons originating from 3 different geographical "clusters"

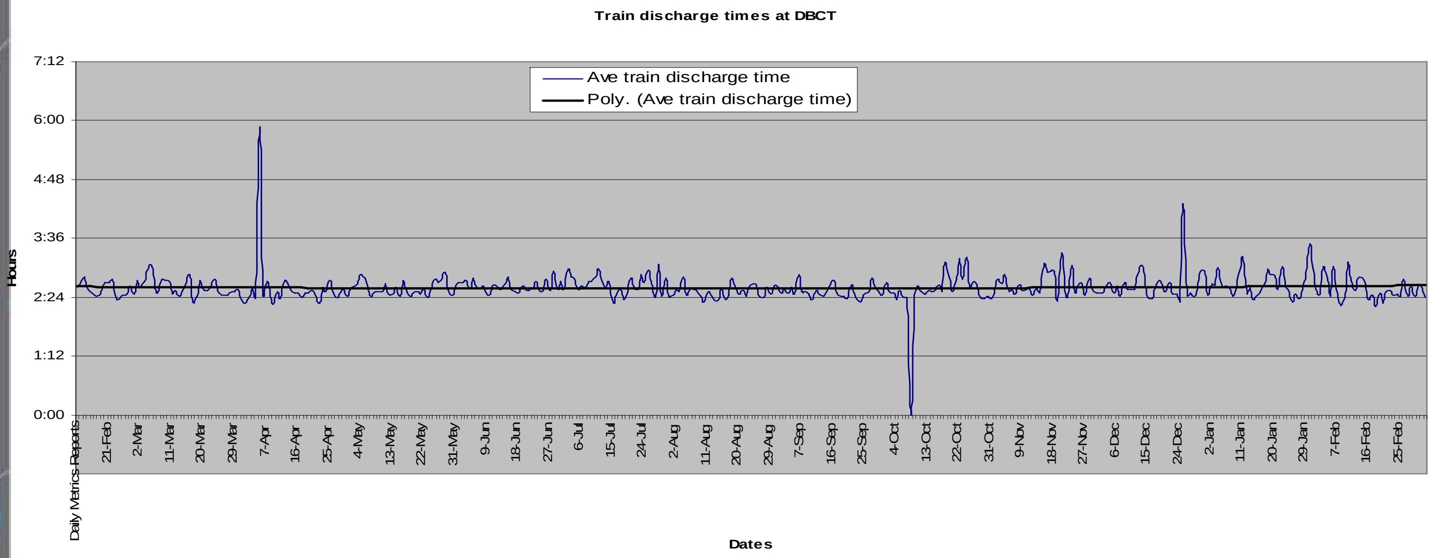


Capacity Issues & Current Management Practices

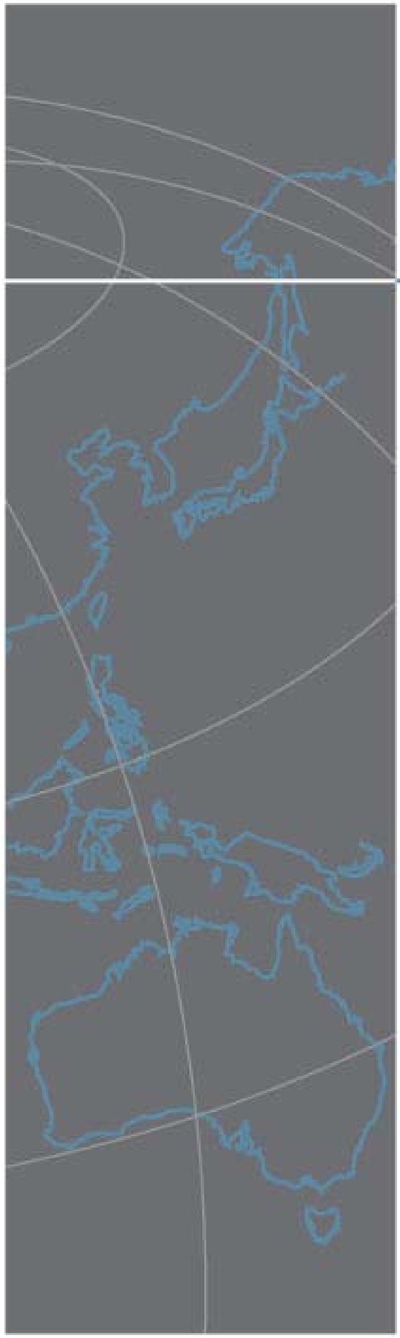
- Sudden and unforseen demand surfaced in April 2004
- Clashed with unresolved terminal pricing negotiations involving arbitration by QCA – resulting capital expansion delays
- Meanwhile, different operational paradigm between port and rail restricts current system capacity
- Currently inloading constrained by supply chain (2 dump stations move approx 51 Mtpa @ 80% utilisation and 55 Mtpa @ 85% utilisation – delivered coal averages 50.5 Mtpa)
- Dysfunction exacerbated by variation caused by lateral and dynamic shipping requirements which compound stockyard management:
  - FOB coal sales (no ability to control ship arrivals)
  - No minimum ship size (deballasting issues)
  - Multi-parcelling of vessels as well as blending
- Train orders therefore driven by availability of stockyard space
- But impossible to accommodate “even railings” and meet shipping demands (demand pull conflicting with supply push)
- Result is either lost rail capacity or lost terminal capacity

Capacity Issues & Current Management Practices (cont'd...)

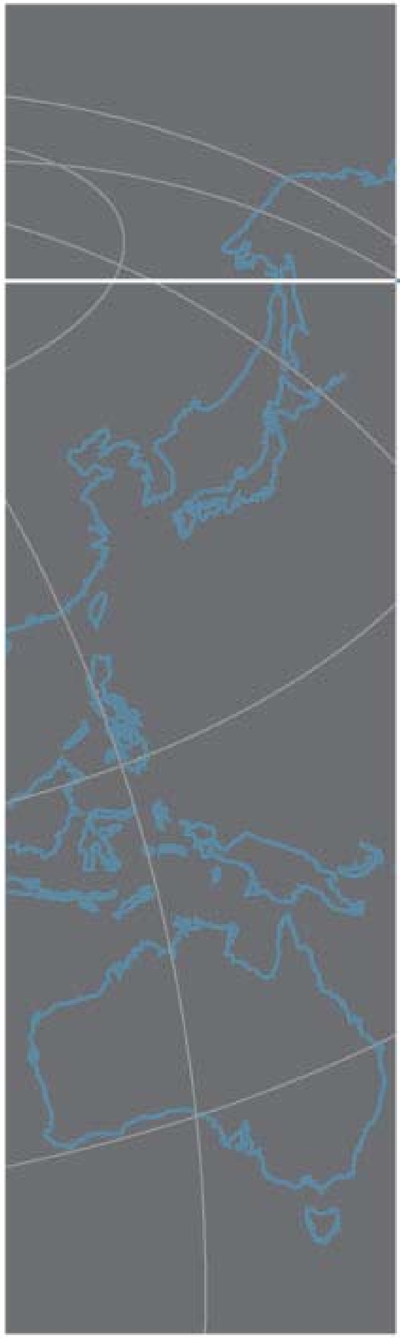
- Current management objective is to reduce variation and minimise train time over DBCT rail pit
- Objective is 2.5 hrs/train @ 85% utilisation
  (i.e. 8 trains/pit x 9,600 mts/train = 153,500 mts/day = 56 Mtpa)



- However increasing demand above 56 Mtpa requires further terminal expansion
- Recent capacity requests greater than next planned expansion



The DBCT Expansion – Eric Kolatchew

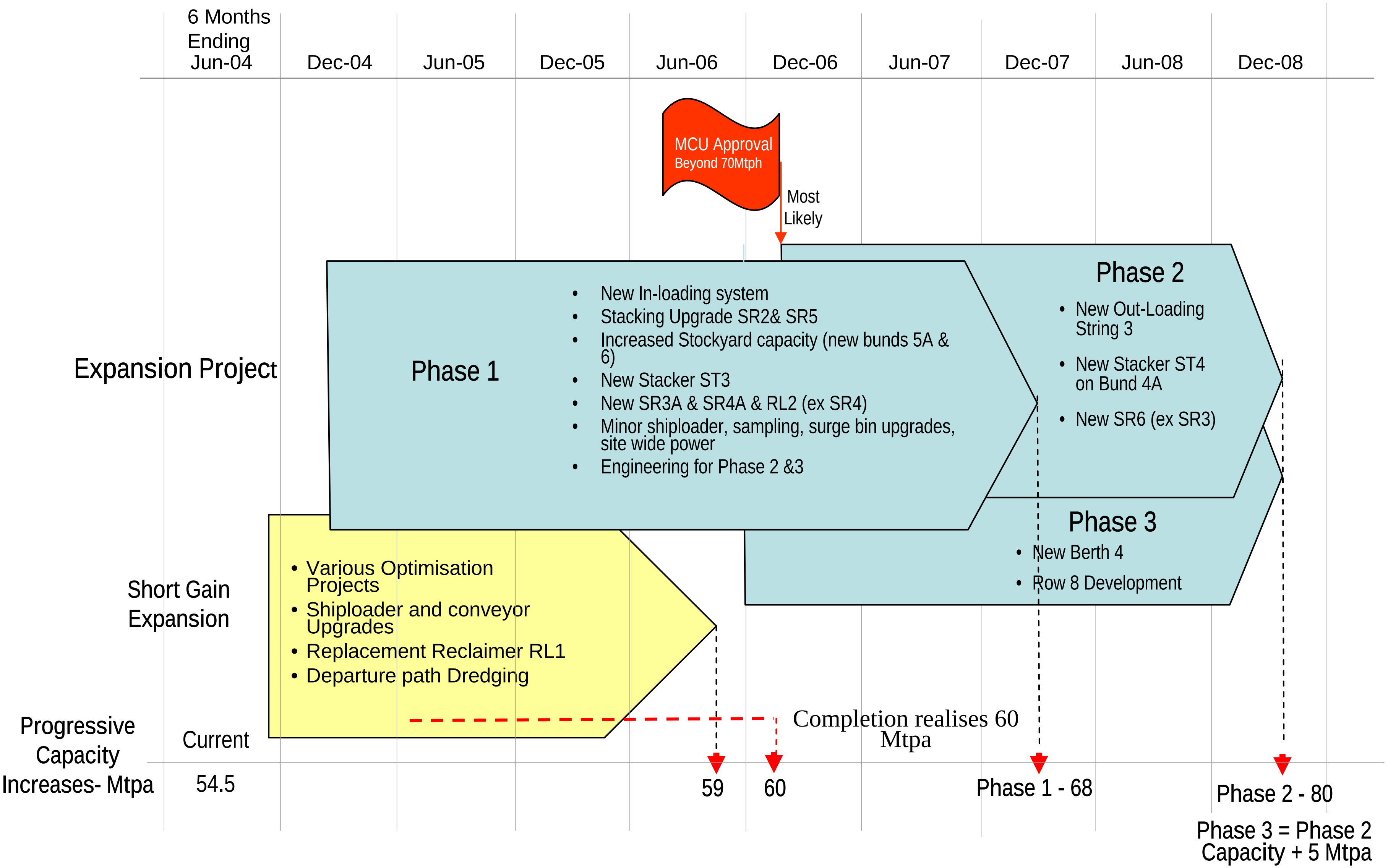


The DBCT Expansion Program

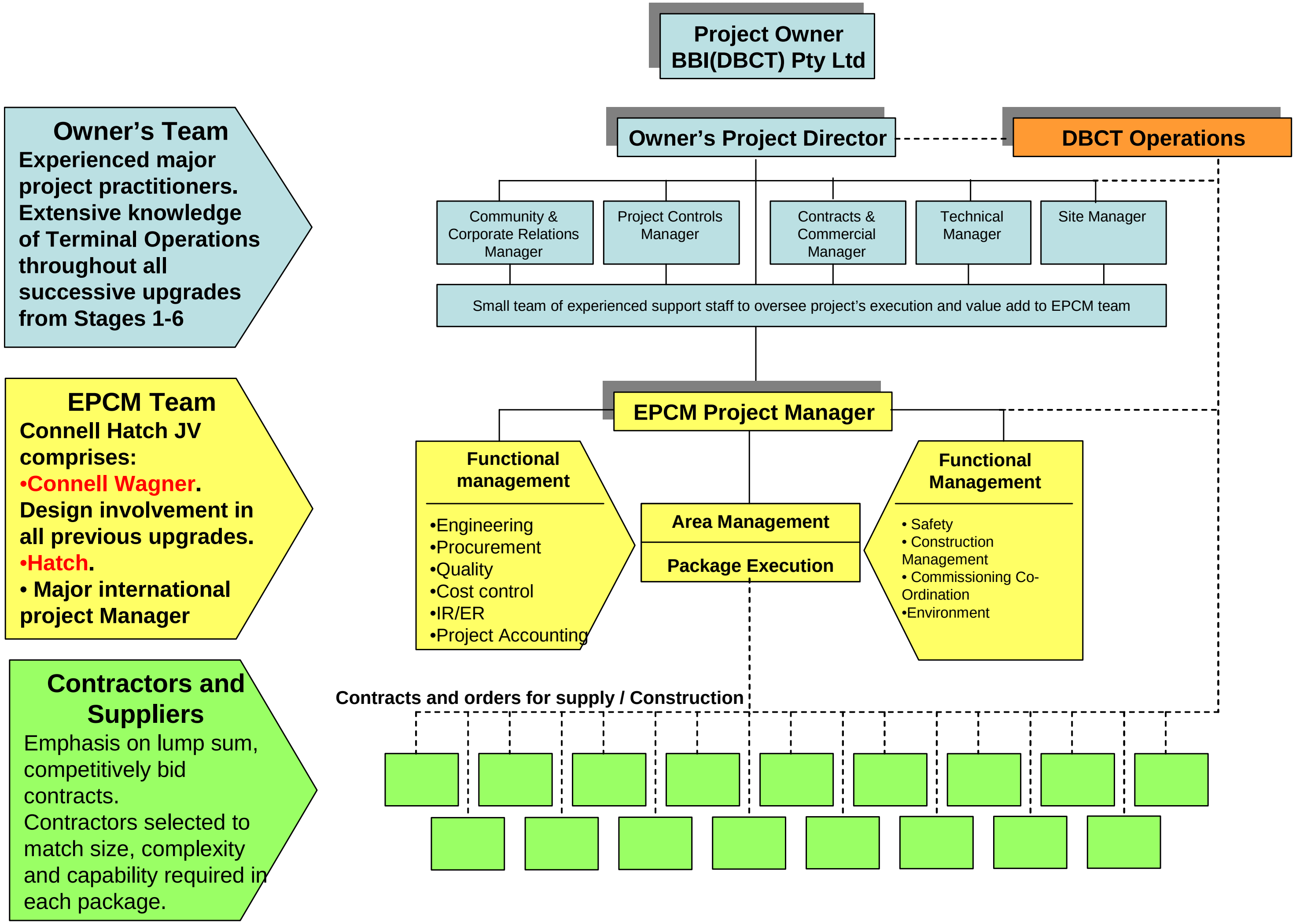
A major expansion of the Dalrymple Bay Coal Terminal is underway, taking its current capacity of 54.5 Mtpa to 85 Mtpa by the end of 2008. A number of key features/characteristics apply to the development.

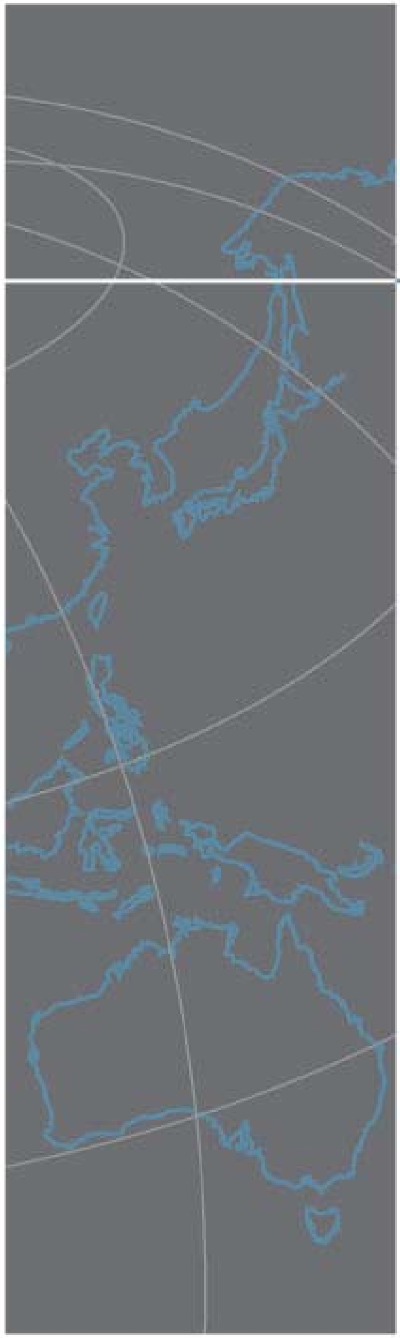
- A key objective is to provide the earliest possible interim capacity increase to address the current high level of demand for coal exports.
- The scale of the proposed expansion will result in capital expenditure of over $1bn (including financing costs)
- Modifications/enhancements are proposed to all major terminal elements of inloading, stockyard, and outloading. Note that the current terminal boundary is unable to be extended.
- The expansion scope has been tailored to allow minimum interruption to terminal throughput during implementation.

- The increased capacity increments will be delivered in phases:



- Implementation of the project will adopt an EPCM delivery approach, this model providing the most appropriate blend of required Owner influence/control for a brownfield environment, and balanced risk allocation through the award of competitively bid lump sum contracts for execution of the work.

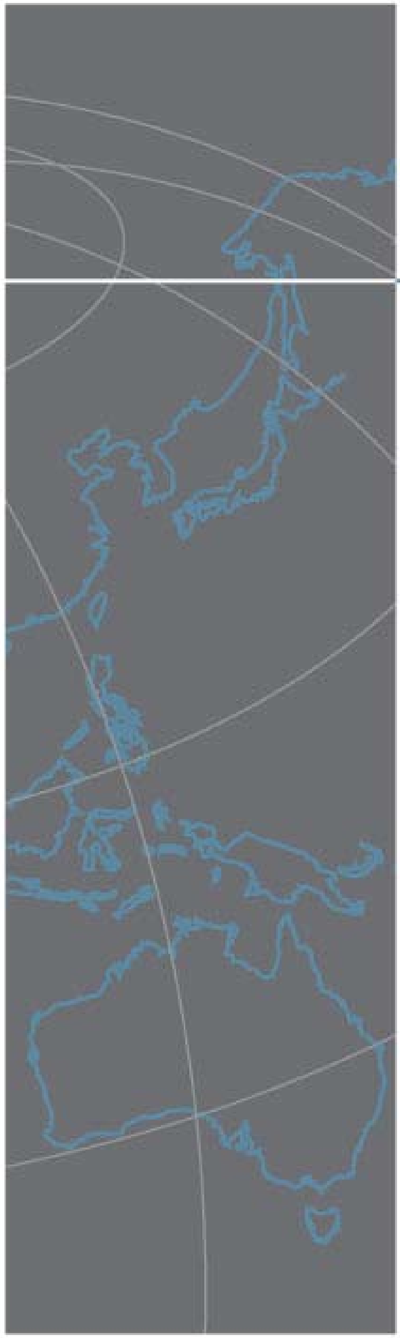




Some Factors Influencing the Expansion

In order to fully appreciate the nature of the proposed expansion and the strategies adopted for its implementation, there are a number of issues/factors that warrant mention:

- One of the schedule drivers in providing the final committed capacity is based on the need for obtaining the relevant development approvals. A duration initially advised to BBI for completion of an EIS was 18 to 24 months, which governed the date before any construction activity could commence for Phase 2. Initiatives to shorten this duration have been implemented through a State controlled MCU process, which may realise approval by mid 2006. If successful, this is will allow completion of Phase 2 before end 2008.

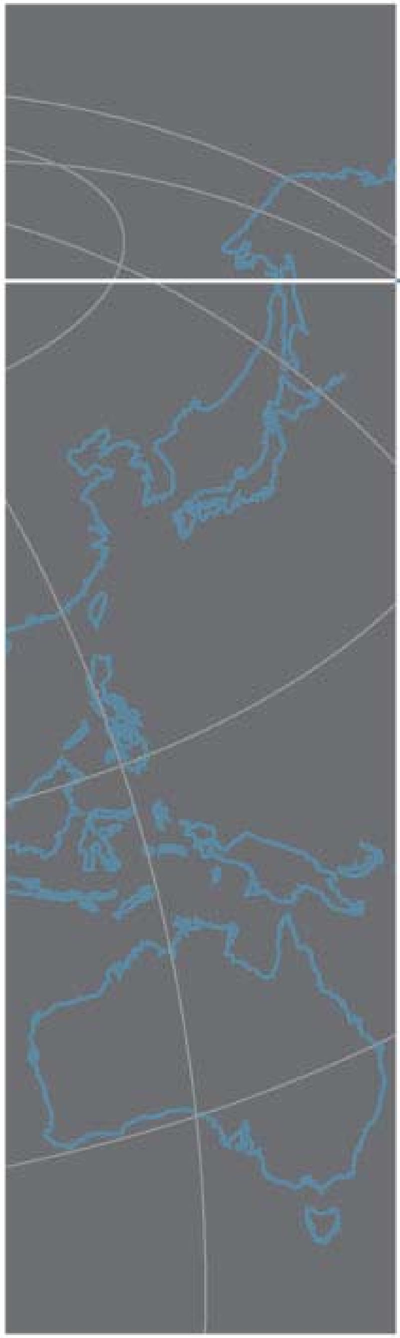


Some Factors Influencing the Expansion (cont'd...)

- The terminal is a regulated asset under the QCA Act.

- The QCA's draft Access Undertaking requires a process to obtain the QCA's approval of the project and to govern the approval of expenditure. This process requires binding capacity commitments from the users for at least 60% of the proposed capacity, 60% of the non-expanding users to not have any objection to the development, submission and approval of a Tender and Contract management Process (TCMP), and submission of the project's estimate, schedule and execution strategies. Actual delivery is subject to audit.

- As at end of May this process had not been completed.



Some Factors Influencing the Expansion (cont'd...)

- A number of consultants/auditors have been/are to be appointed by various stakeholders to overview compliance. The level of oversight and involvement is not typical, and presents a number of challenges to the project, including accommodating the extent of procedures, the amount of documentation, and rigour required, and their impacts on the normal project delivery process.

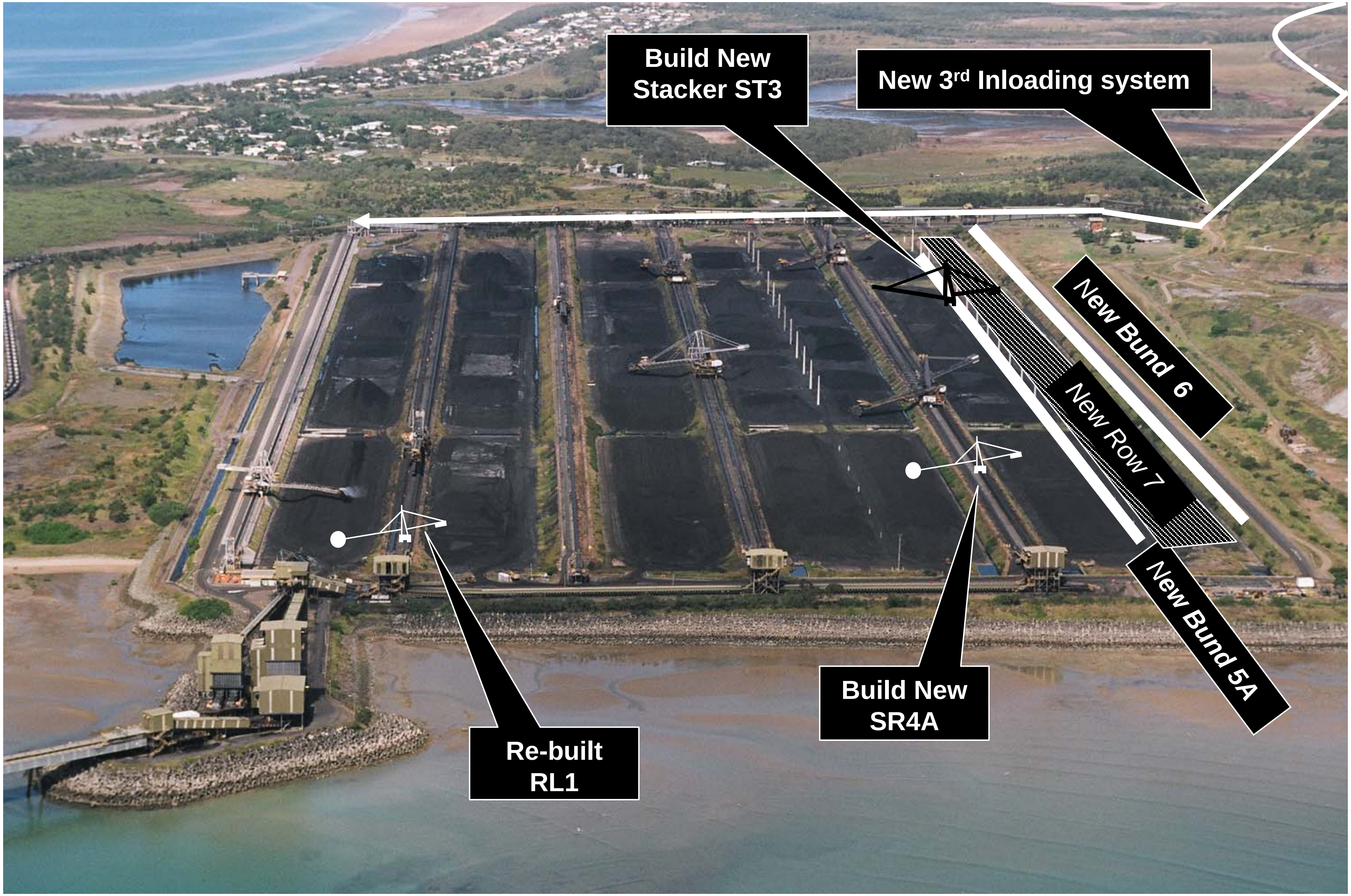
- Operational imperatives and constraints, final User capacity nominations, plus the above factors, have played a large part in determining the expansion's duration, capacity and the associated scope of work, which is illustrated in the following pictures.

Scope of Project

Existing terminal configuration

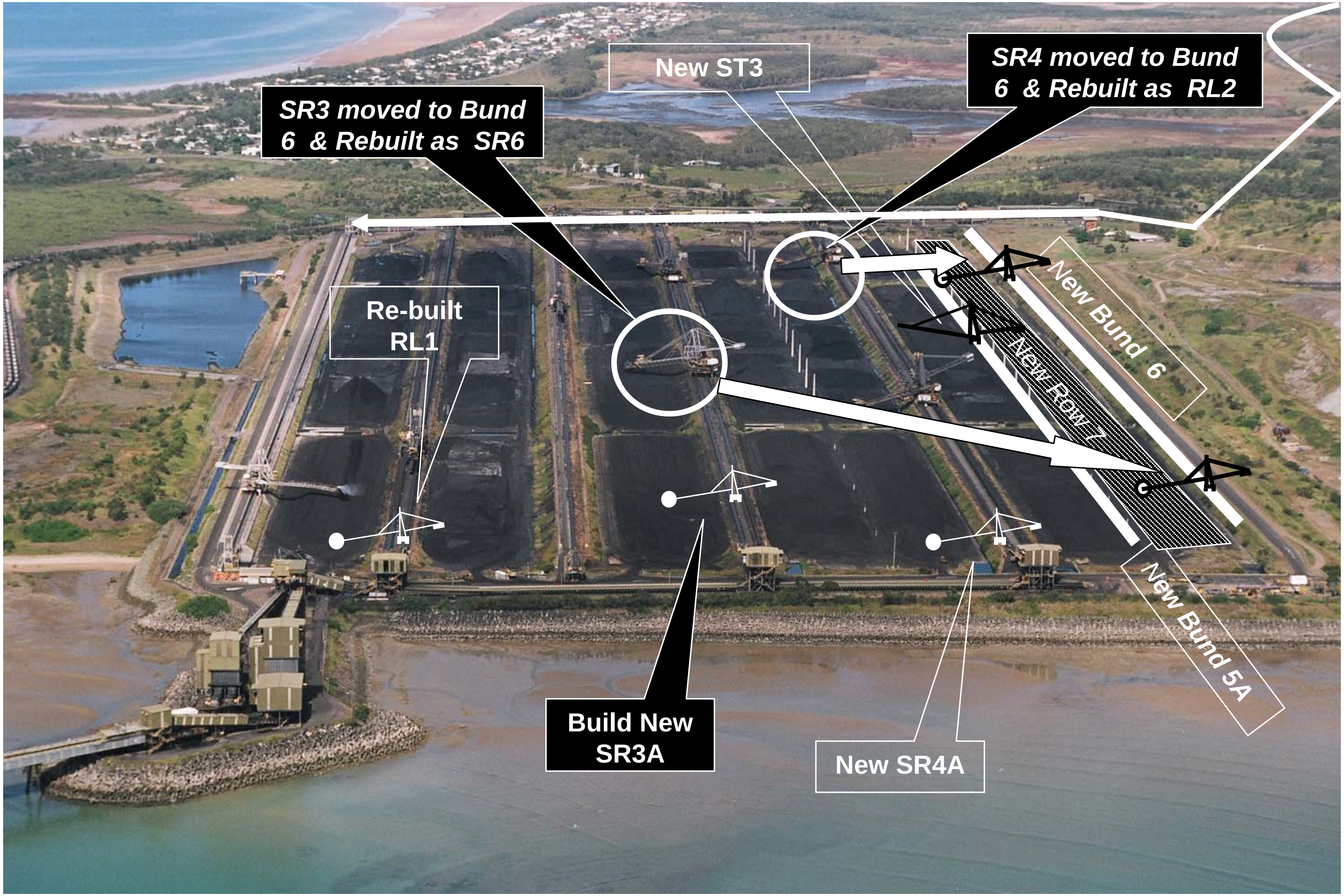
Scope of Project

Proposed terminal configuration



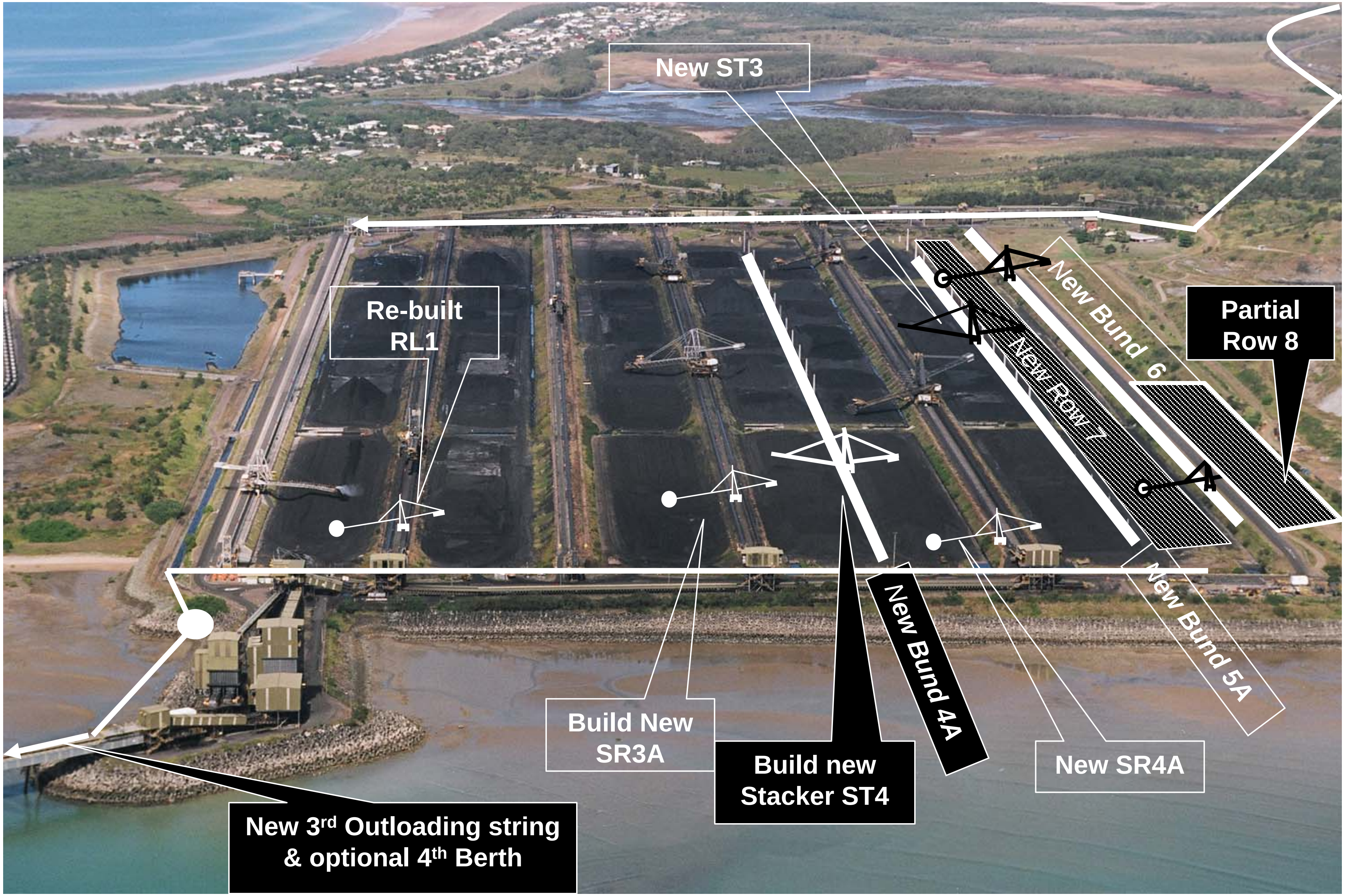
Scope of Project

Proposed terminal configuration



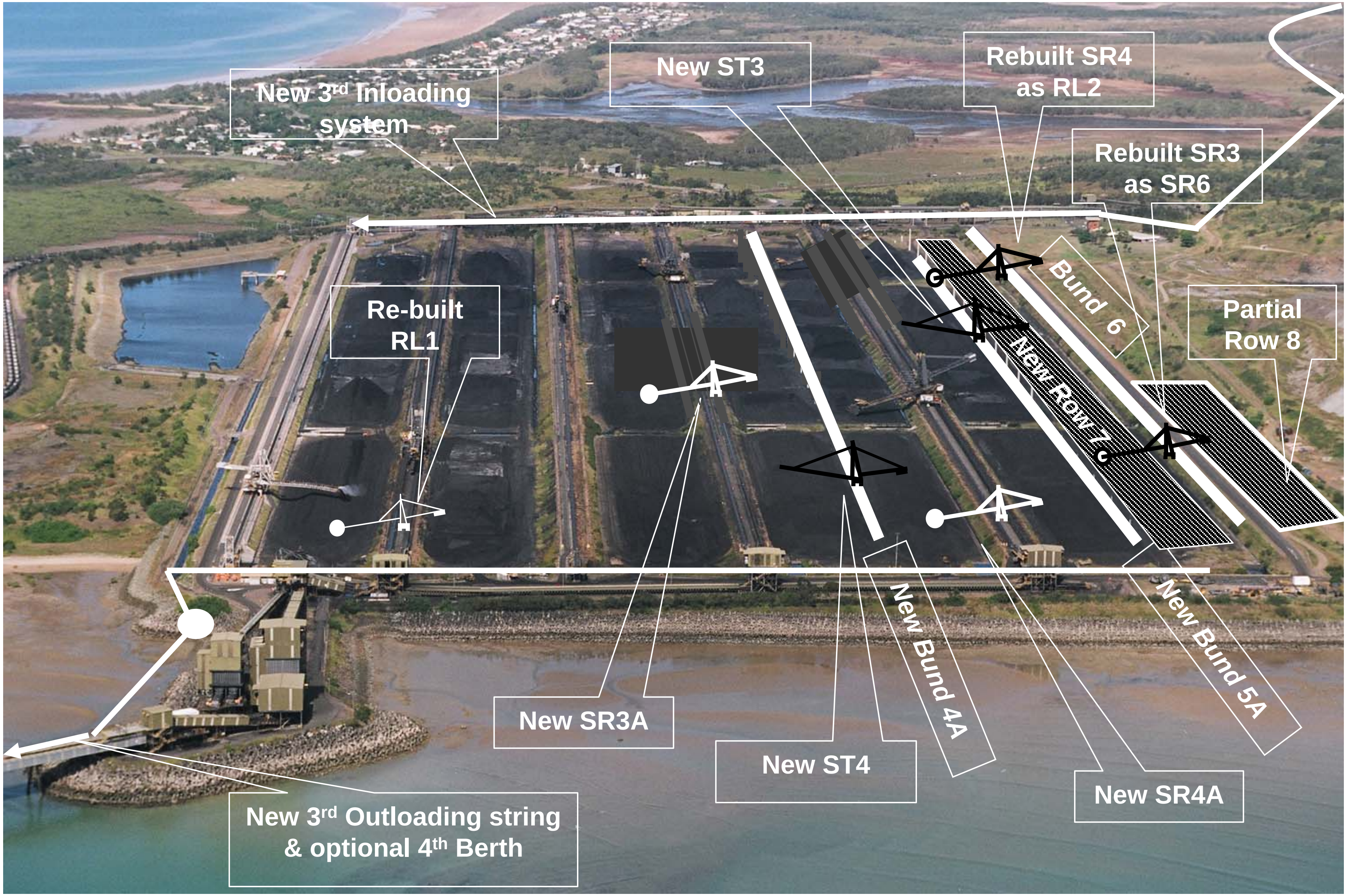
Scope of Project

Proposed terminal configuration



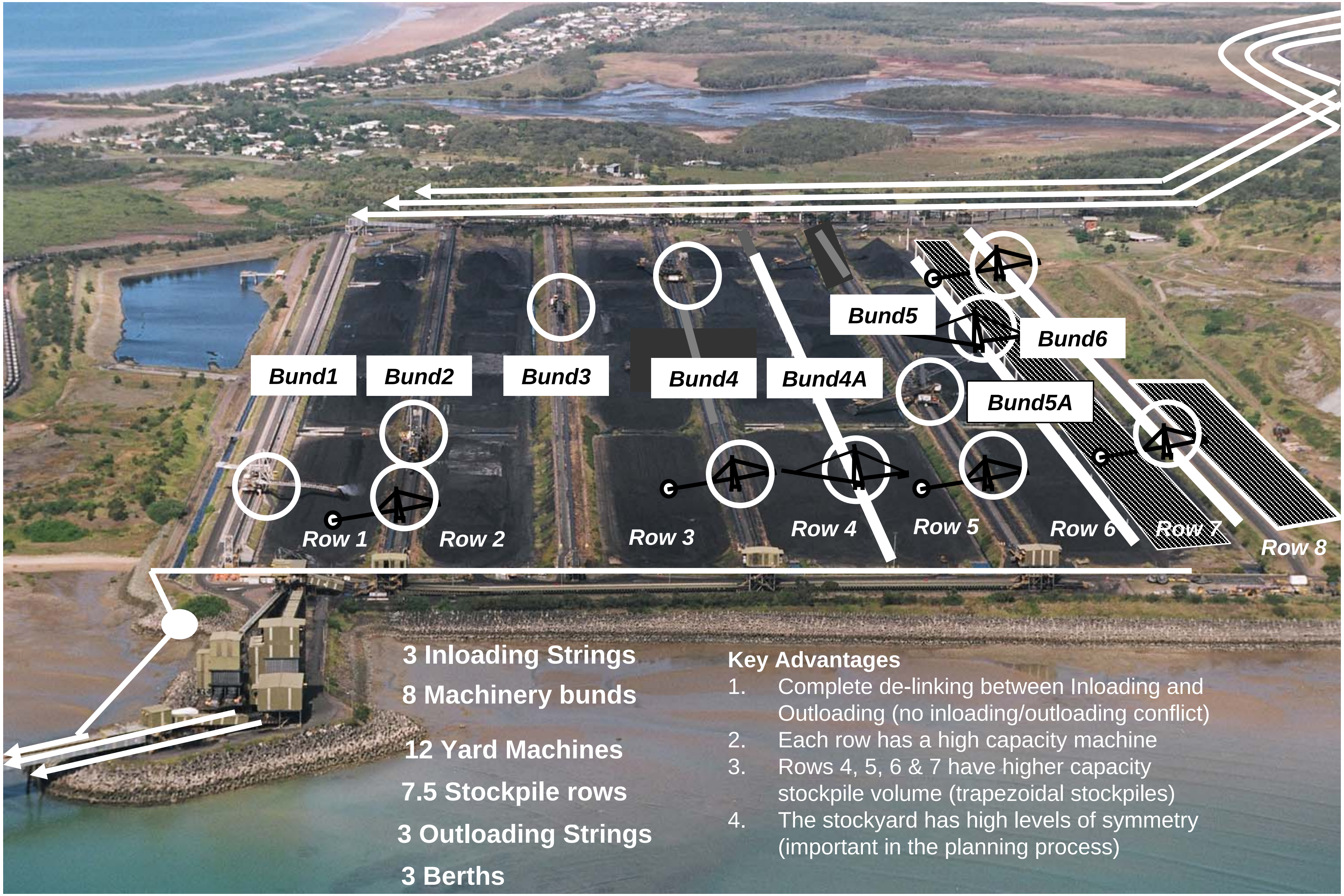
Scope of Project

Proposed terminal configuration



Scope of Project

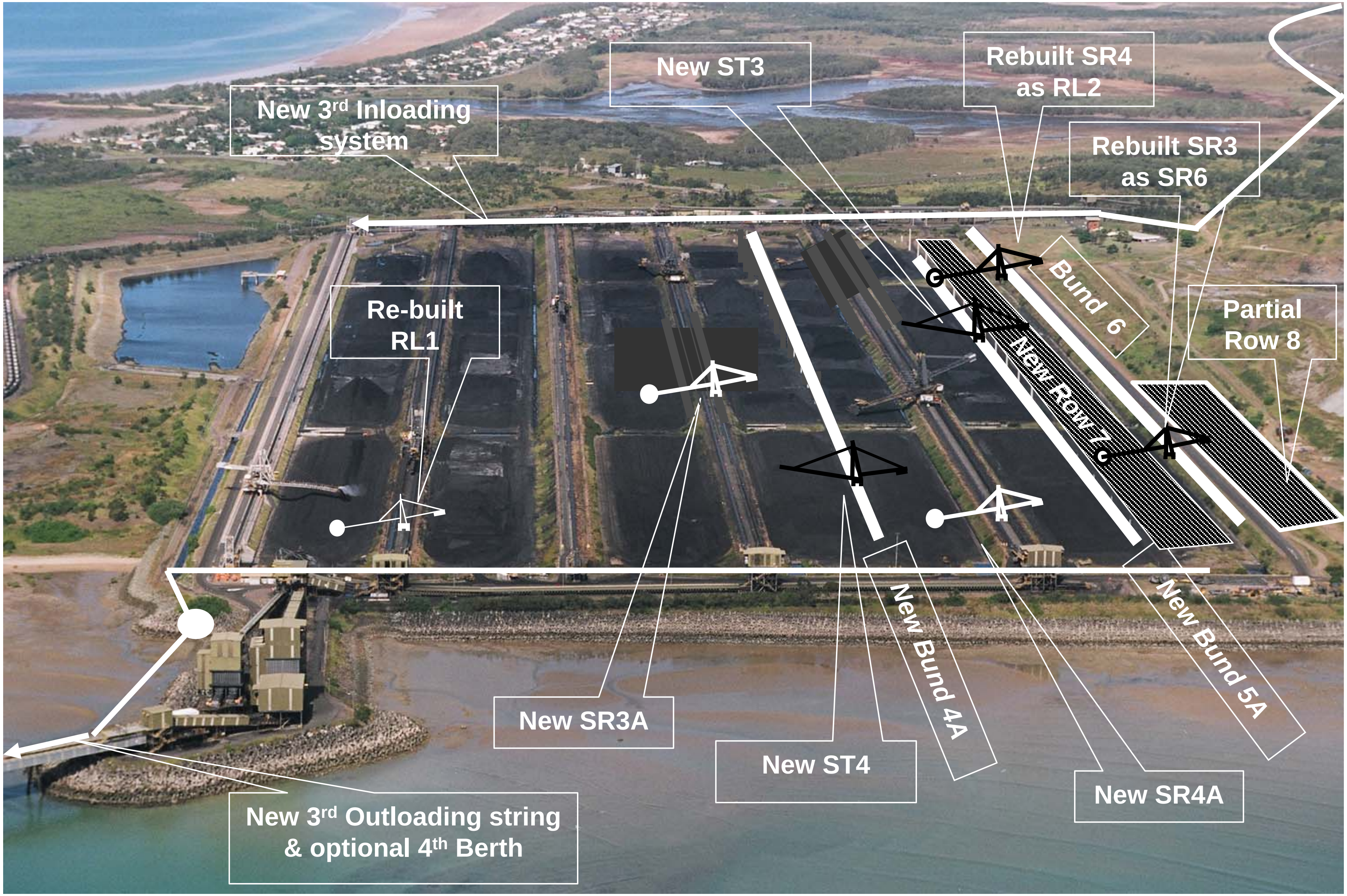
Proposed terminal configuration

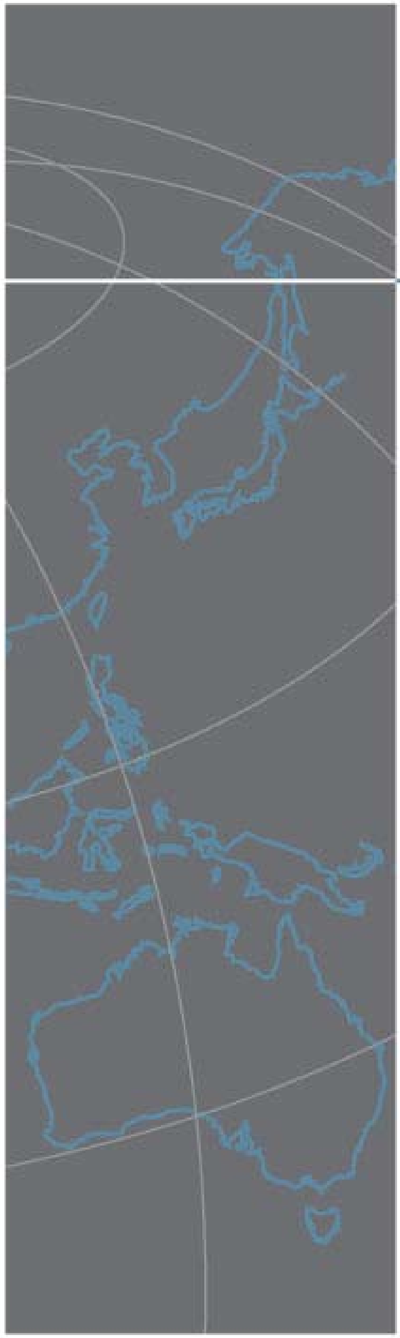


Scope of Project

Proposed final terminal configuration

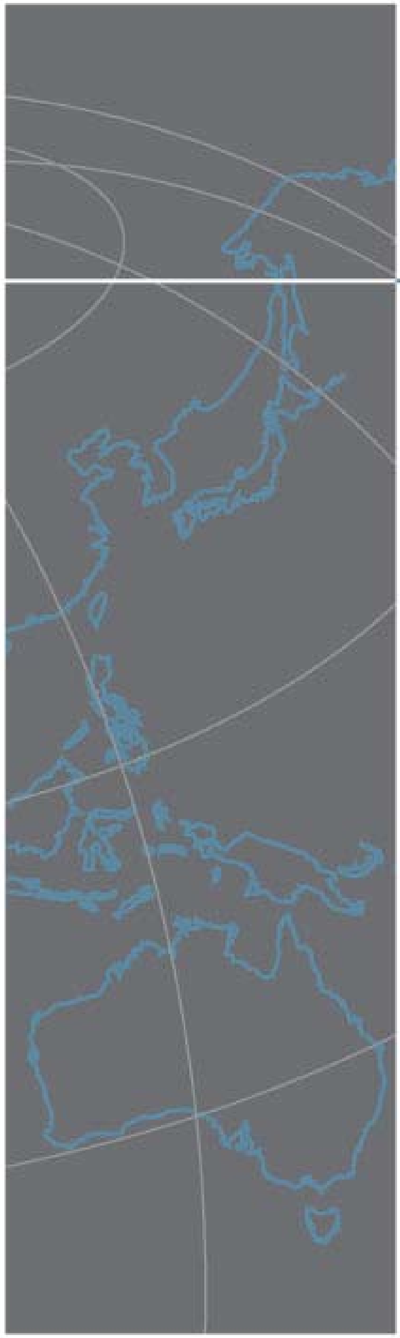
This is the final slide in the animated series showing build-up of scope



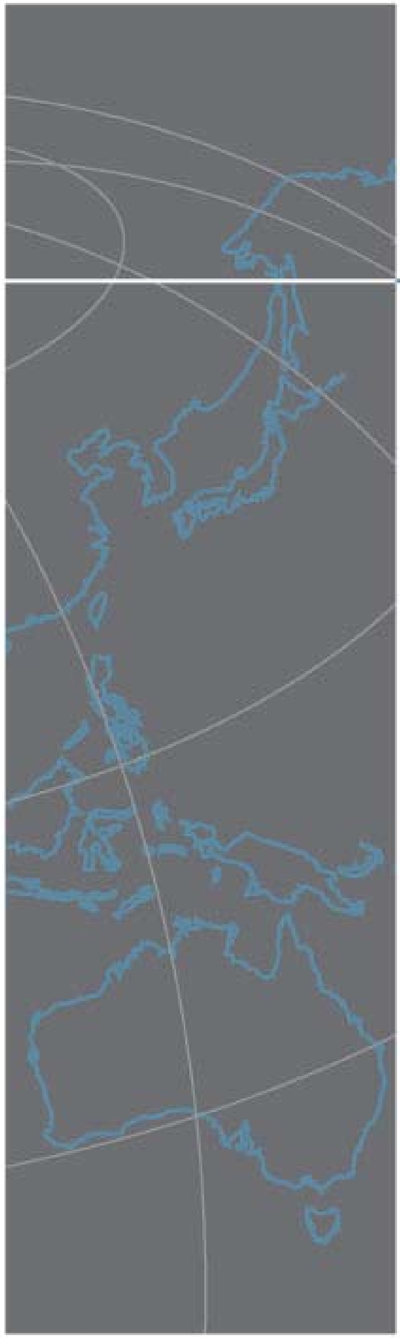


The DBCT Expansion Program – current status

- Project overall is over 10% complete, with engineering for all 3 phases exceeding 65%.
- Over 80% of the value of Phase 1 contracts has been committed.
- Construction activities are well advanced, with over 150 contractors' personnel currently working on site.
- Project is generally on track for completion of Phase 1 by end 2007 and Phase 2/3 by end 2008.
- User capacity commitments support the full 3 Phase expansion. Commencement of Phase 2/3 is subject to State MCU approval, and QCA Expansion Approval – likely before end August 2006.



Capital Efficiency – Ross Parslow

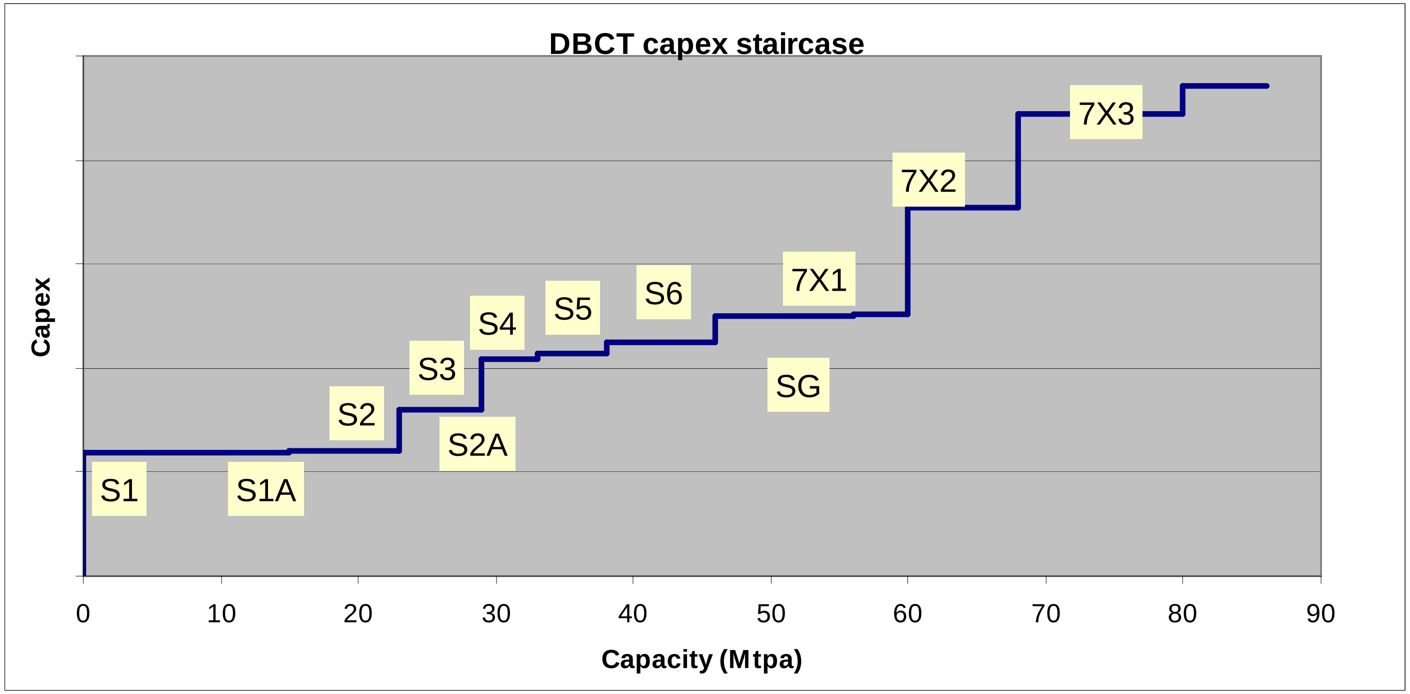


The Capital Efficiency of the DBCT Project

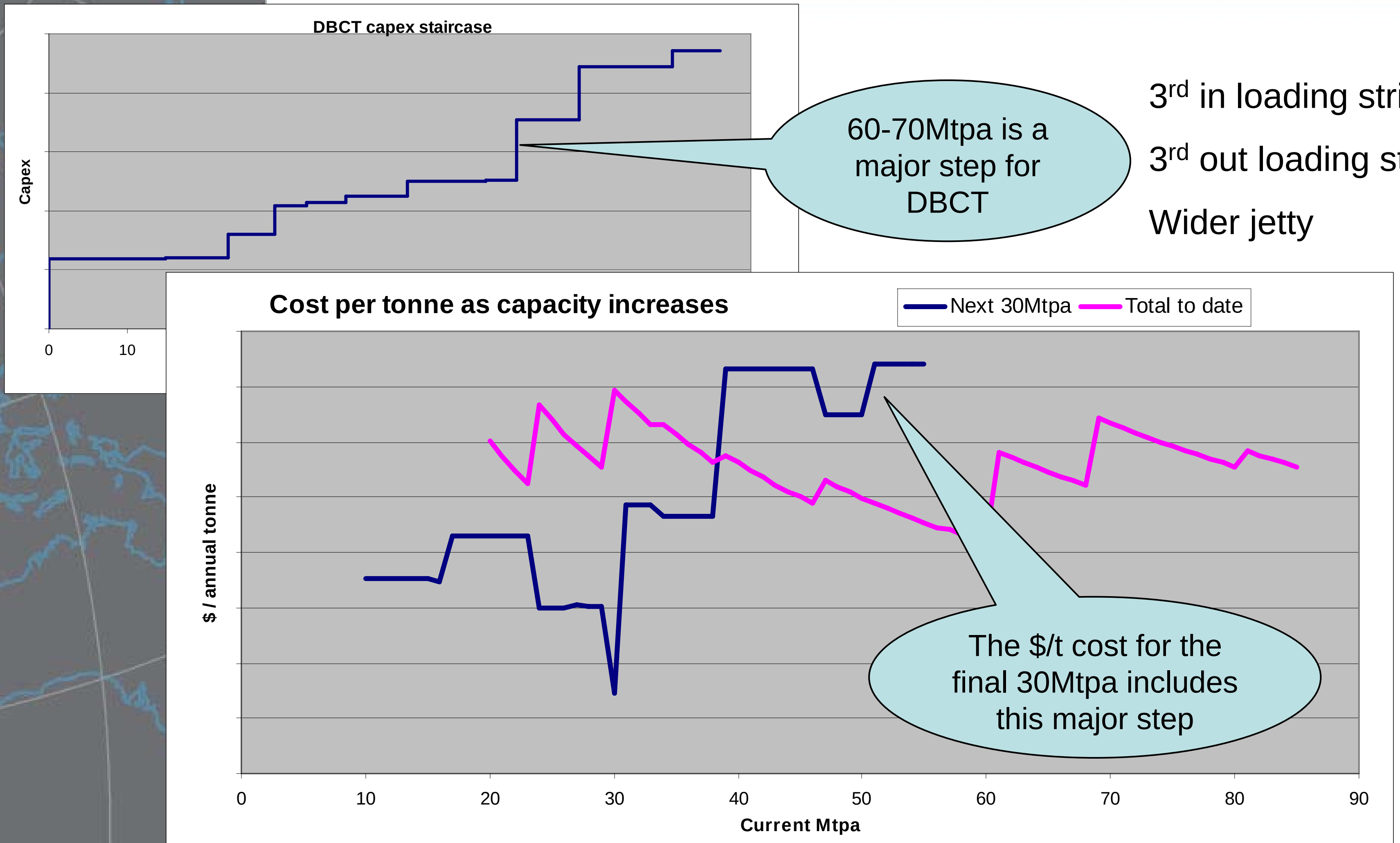
- DBCT 7X is one of 7 coal terminal developments / expansions;
- The industry naturally compares projects – often in " $ / t"; ie
  - capital dollars / tonne of annual capacity created;
- Capital efficiency has to be understood in the context of:
  - Non-linearity: each terminal has its own unique "staircase";
  - Location: jetty length; ground conditions;
  - Brownfield: expansion costs are higher in a brownfield site;
  - Scope inclusions: dredging; rail works etc
  - Estimate inclusions: contingencies; financing costs; etc
  - Timing: for escalation of past costs; current cost drivers;
  - Terminal design: mechanization of stockyard operations.
- DBCT's capital efficiency is best understood in terms of its design staircase; its location; and the factors driving costs.

The DBCT Capital Staircase

- DBCT expanded over 6 stages from the early 1980s up to 2005
- Current expansions will take DBCT from ~54 to 85 Mtpa
- This shows past costs escalated at CPI to 2006 dollars but not to current market rates for construction



The DBCT design and location create an inherent, major step at 60 – 70 Mtpa

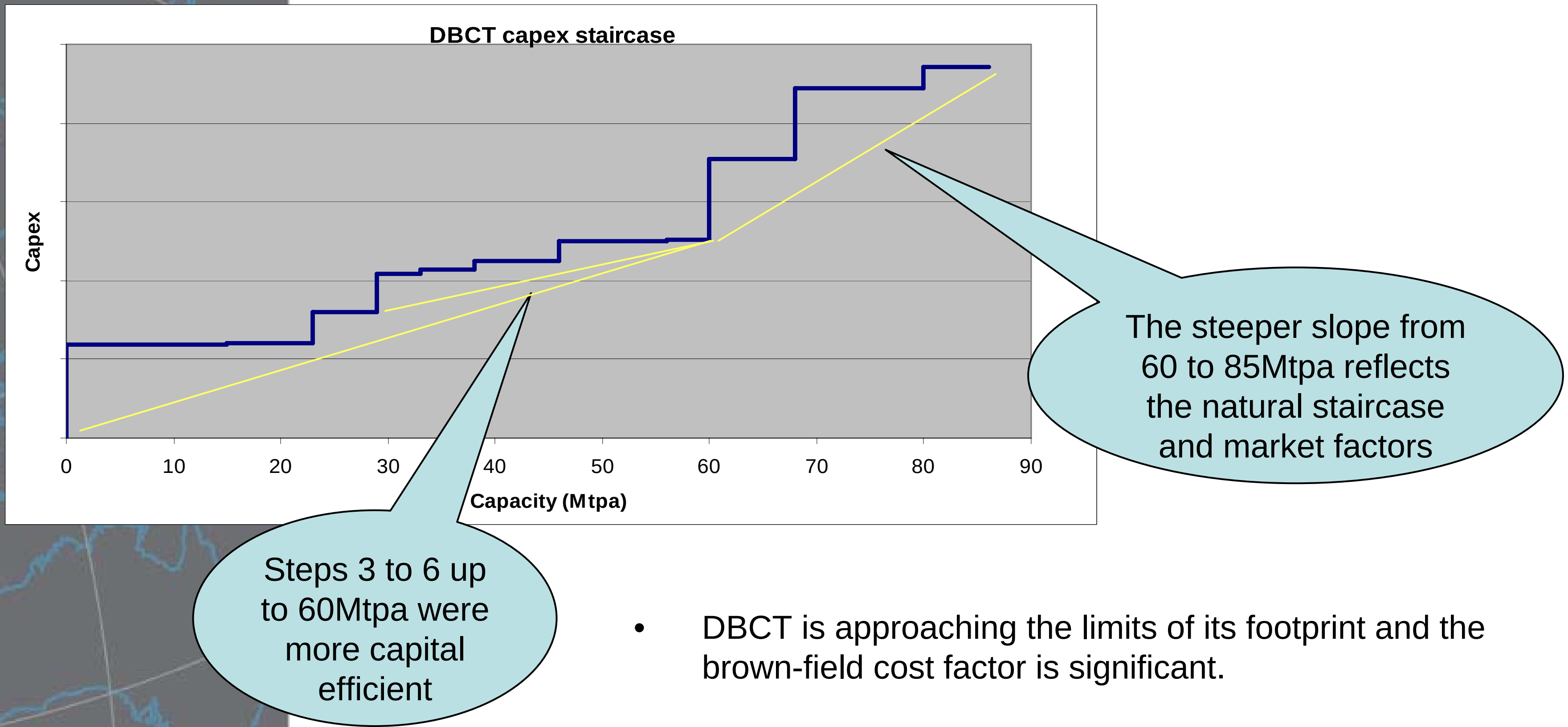


3rd in loading string

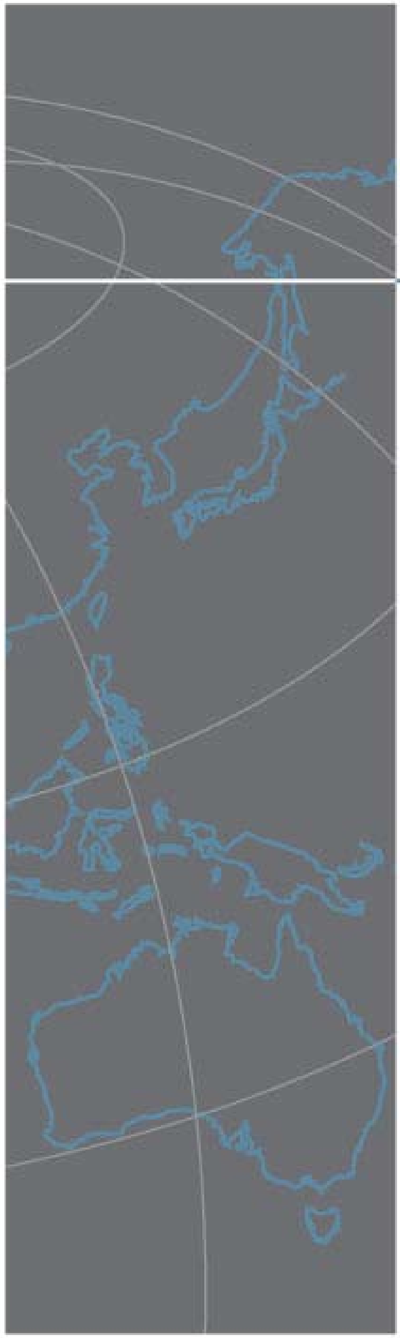
3rd out loading string

Wider jetty

The Goonyella coal chain has enjoyed relatively capital efficient expansions leading up to the current stage



- DBCT is approaching the limits of its footprint and the brown-field cost factor is significant.
- As with all current projects, DBCT is feeling the effects of an overheated construction market.



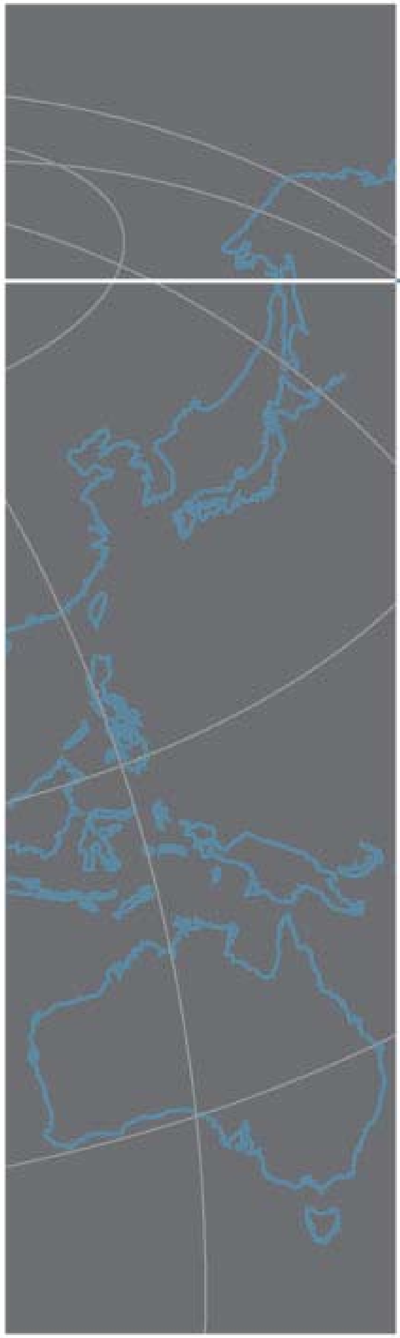
Formal, normalized benchmarking across the current major coal terminal developments is yet to be compiled

- Formal benchmarking requires collaboration of terminal owners.

- Meaningful benchmarks need to:
  - Construct the full capital staircase of each terminal;
  - Normalize the costs (actual & estimates) for:
    - Greenfield / brown field cost differences;
    - Escalation and current construction market conditions;
    - Location factors: dredging / jetty length / yard stabilization;
    - Scope inclusions such as external infrastructure;
    - Estimate inclusions such as contingencies and financing.

- We should all remember when "informally benchmarking" that:
  - DBCT along with the other northern Queensland terminals is a "long jetty" design with significant marine costs;
  - To be comparable, past project costs need to be escalated to 2006 dollars and for current construction market factors;
  - The cost of the terminal is only one part of the total capital and operating cost of new capacity in each coal chain.

Supply Chain Benefits – Greg Smith



Supply Chain Benefits of DBCT Expansion

- Increased inloading capacity resolving current constraint.
- Increased stockyard volume facilitating yard planning options.
- De-link yard machine stacking and reclaiming reliance.
- Increase outloading capacity with deballasting berth option.
- Increase outloading speed on new outloading conveyors.
- Offer potential to develop berth 3 & 4 as high capacity Cape berths
- Greater opportunity to align rail/port interface
- Maintain blending advantage by reclaiming with 2 reclaimers/string
- Allows zonal stockyard planning to match FOB ship presentation
- Reliance on increase cargo velocity to facilitate high terminal capacity as terminal inherently linked to:
  - Mine load-out performance
  - Mine recharge capability
  - Number of operating trains
  - Ability of rail to deliver tonnage to rail pits in scheduled pre-determined sequence

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Supply Chain Benefits of DBCT Expansion