

## **Constraints on Capacity**

A recorded discussion in Perth confirms Halcrow's approach to problem-solving – working together gives the best result.

### **Introduction**

In August 2011 a paper was published listing the top ten business risks facing mining in 2011 and 2012. The theme of capacity constraints ran deep throughout, from interruptions to supply (risk number nine) up to skills shortage (risk number two).

So, in March 2012, Halcrow gathered together a number of key mining industry representatives in Western Australia to discuss the problem of capacity constraints in more depth. They were:

- Michelle Andrews, Deputy Director General for the Department of Mines and Petroleum, Western Australia.
- Mike Appleton, Business Development Manager, Clough Forge
- Brett McLeod, Project Manager for Australian Premium Iron (API) – a joint venture developing a new iron ore mine, railway and port in the West Pilbara

During the discussion, chaired by Halcrow's managing director, George Spink, it became apparent that concerns about capacity constraint could be grouped into three categories; access to infrastructure, approvals and procurement process.

### **Access to infrastructure**

It's common knowledge that a small number of large operators dominate iron ore extraction in the Pilbara area of Western Australia. Each operates their own private networks of transportation and exportation infrastructure. For new or smaller players, this private infrastructure can yield difficult or even closed routes to export, so reducing the opportunity for local communities to benefit.

As the discussion opened, Michelle Andrews explained how, while the private sector leads the way in the development of Western Australia's resources market, the future will require private companies to work much more closely with the Government to rationalise infrastructure needs and costs in order to drive better outcomes for the state.

In the case of the API West Pilbara iron ore project, right from the start it was structured to allow open access for other users. The railway and port facilities will have significant spare capacity and, therefore, to realise the best return on their investment, it makes sense to open access to other operators. As Brett McLeod put it, "We want our railway to work hard."



*From L to R: Mike Appleton (Clough Forge), Brett McLeod (API), Michelle Andrews (Department of Mines and Petroleum WA), Mark Baynham (Halcrow) and George Spink (Halcrow)*

## Approvals

From regulatory to environmental, and everything in between, getting the necessary approvals for new mining developments and their associated infrastructures has often been a very long and drawn out affair.

However, in Western Australia government departments have made significant improvements to the approvals processes; reducing the required timescales. Whilst these are helpful, Michelle Andrews also pointed out that “Further improvements are possible, particularly in integrating different departments and their processes with the overall approvals timeline.”

The panel as a whole felt that private companies can help all relevant parties by highlighting the positive economic and social benefits to pursuing the necessary approvals.

As Michelle Andrews put it, there’s more to a project than dollars and jobs. It is also important to ensure that as an industry, private companies do not lose their “social license to operate” because of poor practice or behaviour.

A key point made by all participants was the critical need for all projects to prepare early in order to allow them to work with the Government and successfully align project aims with public policies.

## Procurement process

The Engineering, Procurement, and Construction Management (EPCM) model has been the traditional method for delivering major infrastructure projects for the major miners in recent years. In Western Australia, the EPCM model has been used in preference to the alliance model which has fallen out of favour.

Whilst it has delivered some excellent project outcomes, in recent years some have begun to raise concerns about the value of EPCM for large infrastructure projects.

API, in particular, questioned the suitability of EPCM model for the West Pilbara Iron Ore Project. Whilst still developing procurement strategies, API’s Brett McLeod says “We know we will use a variety of procurement methods to deliver different parts of the project. We’re also keen to work with organisations that are prepared to jointly identify and allocate risks.”

Mike Appleton, speaking from a contractor’s point of view, stressed the value of taking time to understand what a project really needs and to make early decisions.

Indeed, it was clear from the discussion that the procurement process is an area within the control of all the project stakeholders.

The point was forcefully made by Halcrow’s Mark Baynham, for whom a well-run early contractor involvement phase is essential to avoiding problems later.

## Conclusions

A significant conclusion, which surfaced throughout the discussion, was that problems are best solved when all parties work together; grouping limited resources together to tackle one project and sharing in the benefits.

This is the principle upon which Halcrow works to solve capacity constraint problems – we do it together.

The last word on this subject belongs to API’s project manager, Brett McLeod, “We will take a process of how can we work with you to overcome this problem ... not, it’s your problem, tell us how you’ll fix it.”

To read more about how Halcrow helps develop best solutions to practical problems, [please visit our website](#).



### To discuss further

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