

# MEGA TRANSPORT PROJECTS AND SUCCESS

AUTHORS: Harry T. Dimitriou; Philip G. Wright; E. John Ward

### THIS BRIEF TARGETS

- Decision-makers and others involved in the planning, appraisal and delivery of mega transport projects (MTPs) as well as those concerned with their performance and impact.
- The brief will be of interest to academics, researchers and students working in the field of mega transport projects and infrastructure development.

# **KEY MESSAGES**

- Decision-makers need to recognize Mega Transport Projects (MTPs) as major 'Agents of Change' with multiple spatial, economic and environmental implications. This requires early engagement with key stakeholders, awareness and sensitivity to context and an 'open systems' thinking.
- MTPs need to be accompanied by suitable Policy and Legislative frameworks that remain constant throughout the project lifecycle.
- The common appraisal criteria for judging the 'success' of MTPs - completing projects on time, on budget, and as per specifications - are capable of providing only a partial basis for a thorough assessment.

Across the globe Mega Transport Projects have aroused controversy about their ability to deliver the infrastructure, services and associated developments they promise. This Research Brief presents key lessons and insights derived from a synthesis of findings from 30 MTP case studies in ten countries.

he OMEGA Centre's research focused on achieving a better understanding of decision-making in the planning, appraisal and delivery of MTPs. In the OMEGA research, MTPs are defined as land-based transport infrastructure investments within and connecting major urban areas and metropolitan regions in the form of bridges, tunnels, road and rail links or combinations of these entailing a construction cost in excess of US\$ 1 billion (at 1990 prices). The research was based on interviews with more than 300 project stakeholders who had been involved in the commissioning, development and/or assessment of mega transport projects.

The investigation generated a wide range of insights centred on nine key themes.

# **Key Lessons**

• MTPs as 'Agents of Change' - MTPs are frequently major 'agents of change' with multiple spatial, economic and environmental implications. There is a

- need to recognise this since the potential for such projects to alter radically the context into which they are introduced is often under-appreciated by decision-makers.
  - MTPs as 'Open Systems' MTPs both as dynamic infrastructure and decision-making systems require 'open systems' thinking in light of the large-scale, complex and fluid relationships they have with all those involved and affected by them.
  - MTPs as 'Organic Phenomena' MTPs should be viewed as 'organic' phenomena rather than static engineering artefacts. Decision-making concerning them can as a result sometimes benefit from pauses of activity that offer a 'time to breathe'. This temporary hiatus can provide invaluable opportunities to reflect on the scope, cost, scale and impacts of a project.
  - The Framing of MTPs The changing demands placed on MTPs can make it difficult to assess their successes (and failures) particularly in the long term. Proper framing of such projects enables their appraisal and evaluation to be based on more sustainable, equitable and transparent foundations. Currently, the common appraisal criteria for judging the 'success' of MTPs are those associated with completing projects on time, on budget, and as per specifications but these are capable of providing only a partial basis for a thorough assessment.
  - The Power of Context Awareness and sensitivity to context on the part of key decision-makers is vital for the 'success' of MTPs. 'Context' embodies the cultural beliefs and values, time and space dimensions, economic circumstances, institutional frameworks and political frameworks.
  - Role of Sustainable Development Visions The lack of clear and shared visions of the meaning of 'sustainable development' threatens to undermine the potential for MTPs to make a positive contribution to it. Bridging the gap between meeting the more immediate goals of project delivery and the longer term inter-generational sustainable aims remains all important.
  - Engaging with MTP Stakeholders Effective early engagement with key stakeholders is critical to successful MTP planning, appraisal and delivery. It presents opportunities to manage and mitigate risk, uncertainty and complexity. Building effective relationships is in turn dependent on the establishment of trust, credibility and transparency among the parties involved, as well as successfully managing multistakeholder trade-offs in decision-making.

- Institutional, Policy and Legislative Support MTPs are unlikely to deliver the full range of 'agent of change' benefits unless accompanied by suitable policy and legislative frameworks that remain constant throughout the project lifecycle.
- Lesson Learning and Sharing Systematic, widespread lesson-learning and sharing MTP experience is rare. This lack of co-operation both decreases the potential for the application of innovation to decisionmaking and deprives interested parties of the ability to capitalise on each other's knowledge.

### What should be done differently?

- Politicians They can make a contribution: by adopting a more open view about the capabilities and impacts of such projects; by providing strong sustained leadership; and by ensuring increased participation in information gathering, scrutiny and information sharing.
- Public sector stakeholders They should provide to decision-makers a full transparent account of all aspects that contribute to project 'success' or 'failure'. Officials need to present MTPs as having wide-ranging and uncertain impacts over lengthy time periods, which can make them 'big gambles'.
- Private sector stakeholders They can become more significant forces for change by adopting a proactive approach towards sharing the extensive knowledge gained in past MTP planning, appraising and delivering experiences in different contexts rather than hiding behind narrow commercial criteria.
- Other key MTP stakeholders The media, think tanks and academic institutions need to play a more active role in providing critical 'oversights' of the field, sharing and disseminating knowledge, as well as promoting debate about the potential transformational role of MTPs and the contributions they can make to sustainable development.

#### Further Reading

Mega Projects Executive Summary – Lessons for Decision-makers: An Analysis of Selected International Large-Scale Transport Infrastructure Projects, pdf version and abstract:

www.omegacentre.bartlett.ucl.ac.uk/publications/ reports/mega-project-executive-summary/

**THE OMEGA CENTRE** is a global Centre of Excellence funded by the VREF, and is based at the Bartlett School of Planning at University College London (UCL). Outputs from the research include: working papers, research reports, seminars, workshops and an MSc programme at UCL. www.omegacentre.bartlett.ucl.ac.uk/

