Engineering & Construction

Infrastructure in India

A vast land of construction opportunity

Contributors	Jonathan Hook, Michael Cracknell, Vasant Gujararthi, Ravi Bhamidipati, Amrit Pandurangi, Girish Mistry, Hemal Zobalia, Vishwas Udgirkar, Mukesh Rajani, Graham Dredge, Jimit Devani and Raj Julleekeea.
Principal author	Elizabeth Montgomery
Graphic design	Hamilton-Brown

Contents

"Expanding investment in infrastructure can play an important counter cyclical role. Projects and programmes [are] to be reviewed in the area of infrastructure development, including pure public private partnerships, to ensure that their implementation is expedited and does not suffer from [the] fund crunch."

Mr. Manmohan Singh, Indian Prime Minister,
(quoted in newspaper reports, October, 2008)

Welcome

In this paper, we examine the opportunities for the engineering and construction (E&C) industry in India, one of the fastest growing economies in the world. We also focus on the structuring opportunities and some of the challenges overseas participants are likely to encounter.

India's economy is big and getting bigger. PricewaterhouseCoopers estimates that India will become the world's third largest economy by 2050. Liberalisation of government regulations and a deliberate strategy on the part of the Indian Government to promote infrastructure spells opportunity for E&C companies.

Nearly all of the infrastructure sectors present excellent opportunities, with roads and highways, ports and airports, railways and power standing out as particular bright spots, with staggering sums of investment planned. Public private partnerships (PPPs) are gaining in importance, and are benefiting from government support – targeted PPP participation is US$150 billion. Companies experienced in structuring these types of deals should be able to use their expertise to good effect in the Indian marketplace.

Operating in India requires a thorough understanding of the local market. Companies need to do their homework in order to understand a host of tax and regulatory issues before bidding on projects or setting up operations. Whether or not a permanent establishment is created, how onshore versus offshore services and supplies are managed in a particular contract, and indirect tax implications can all have a major impact on the bottom line. Further, foreign players are likely to need to identify promising local companies, then make a case for a profitable partnership, in order to achieve a win-win situation in India. Still, there is a strong rationale for many E&C companies to invest in India sooner, rather than later. Not only are there substantial opportunities now, but establishing relationships and a presence in the market can help to ensure continuing project potential over the medium- and long-term.

Looking ahead, we believe that it is imperative that infrastructure development occurs in a sustainable manner, in India and around the globe, if the impact of climate change is to be slowed to broadly acceptable levels. The Indian Government must maintain a commitment to ensuring that rapid growth does not happen at an untenably high environmental cost, and infrastructure projects will play a key role in ensuring the success of 'green growth'. Those E&C companies taking a holistic approach to building a sustainable infrastructure will have a strong competitive advantage.

November 2008

Jonathan Hook

Global Engineering & Construction leader

Ravi Bhamidipati

India Engineering & Construction leader

Reasons to invest in India:

- One of the world's fastest growing economies – and growth expected to continue at 7-7.5% despite the global downturn
- Few restrictions on foreign direct investment (FDI) for infrastructure projects
- Tax holidays for developers of most types of infrastructure projects, some of which are of limited duration
- Opening up of the infrastructure sector through PPPs

Projected spending from FY07-FY12 in selected infrastructure segments:

- Electricity: US$167 billion
- Railways: US$65 billion
- Road and highways: US$92 billion
- Ports: US$22 billion
- Airports: US$8 billion

"The link between infrastructure and economic development is not a once and for all affair. It is a continuous process; and progress in development has to be preceded, accompanied, and followed by progress in infrastructure, if we are to fulfill our declared objectives of generating a self-accelerating process of economic development."

Dr. V. K. R. V. Rao [noted Indian economist, early 1980s]

Introduction

The Indian economy is booming, with rates of Gross Domestic Product (GDP) growth exceeding 8% every year since 2003/04. This ongoing growth is due to rapidly developing services and manufacturing sectors, increasing consumer demand (largely driven by increased spending by India's middle class) and government commitments to rejuvenate the agricultural sector and improve the economic conditions of India's rural population. Construction is the second largest economic activity in India after agriculture, and has been growing rapidly. The production of industrial machinery has also been on the rise – and the increasing flow of goods has spurred increases in rail, road and port traffic, necessitating further infrastructure improvements.

In the fiscal year ending March 2008, India's GDP grew by more than 9%. This robust rate of expansion was initially forecast to continue in the 2008-2009 fiscal year. In summer 2008, however, the combined impact of slowing Indian consumption, a higher domestic cost of capital and reduced capital access from international capital markets raised concerns by some analysts that the rate of growth might be slowing. In October 2008, India's Prime Minister, Mr. Manmohan Singh, affirmed the Government's view that a rate of growth of 7-7.5% remains realistic, even given the global credit crunch, and assured observers that the country's Government will take action if necessary to support businesses and the financial markets. Mr. Singh has also singled out infrastructure investment as particularly vital.

Indeed, even with a somewhat slower rate of growth, the Indian economy is still expanding significantly, and substantial investment in infrastructure continues to be required in order to sustain India's economic progress. The country's capacity to absorb and benefit from new technology and industries depends on the availability, quality and efficiency of more basic forms of infrastructure including energy, water and land transportation. In some areas, roads, rail lines, ports and airports are already operating at capacity, so expansion is a necessary prerequisite to further economic growth.

The Indian Government recognises this imperative. As per the Eleventh Five Year Plan, more than US$500 billion worth of investment is planned to flow into India's infrastructure by 2012. Construction projects account for a substantial portion of the proposed investments, making the E&C sector one of the biggest beneficiaries of the infrastructure boom in India. The regulatory environment is relaxing to encourage further foreign direct investment (FDI).

Private sector participation is integral to these plans. PPPs have been identified as the most suitable mode for the implementation of projects – and indeed, are rapidly becoming the funding norm. Their share of the total planned infrastructure improvements is projected to be around 30% (US$150 billion). Power and road projects top the list, and other transportation sectors such as railways, ports, and airports are also targeted for major investments.

Companies looking to capitalise on the situation need to plan their strategy for entering the market carefully. Understanding the local market, including selecting complementary local partners, is vital. Tax optimisation is a key cost component – while substantial tax benefits are provided for infrastructure projects, developers need to be savvy about structuring their contracts. Good tax planning can have a potentially decisive impact, especially in bidding situations, and help to avoid unnecessary litigation later.

Foreign Direct Investment (FDI) and the regulatory environment

Major infrastructure development requires a substantial influx of investment capital. The policies of the Indian Government seek to encourage investments in domestic infrastructure from both local and foreign private capital. The country is already a hot destination for foreign investors. As per the World Investment Report of the UNCTAD, India was rated the second most attractive location (after China) for global FDI in 2007.

Currently, India has FDI of about US$21 billion per year, well below the targeted US$30 billion. In order to increase FDI inflows, particularly with a view to catalysing investment and enhancing infrastructure, the Indian Government has introduced significant policy reforms. For example, it now permits 100% FDI under the automatic route for a broad range of sectors (see Figure 1) – only certain post-investment intimation is required. For FDI in a few sectors, a prior approval is required, which takes around 6-8 weeks. As part of policy reforms, the Indian Government is constantly simplifying the approval route process, including setting up several agencies to expedite FDI approval. Further liberalisation is expected as the Government continues to emphasise infrastructure investment.

In August 2008, a press report stated that Morgan Stanley was looking to invest up to a quarter of its US$4 billion global infrastructure fund in emerging markets, notably India and China – and that in India, Morgan Stanley would face competition from Australia's Macquarie Group, JP Morgan, Goldman Sachs and Deutsche Bank, all looking to channel foreign investors' money into Indian infrastructure. While some of this planned investment may be reduced or delayed given the current environment in the credit markets, India is still likely to garner substantial FDI, particularly if its economy is able to maintain a fairly strong rate of growth in the face of a global recession.

From an exchange control perspective, India is moving towards full current account convertibility. Most revenue transactions are freely permitted, except certain transactions like royalty, consultancy fees, etc., which are subject to certain limits. Capital account transactions need prior approval, except where specifically permitted. In order to promote the construction sector, the Indian Government has relaxed some of the exchange control restrictions and is now allowing foreign nationals/ citizens to acquire immovable property in India, subject to certain conditions and procedures.

Figure 1: FDI routes

Approval Route – Permission required	Automatic Route – Freely permissible (100%)
• Existing Airports – beyond 74% • Atomic Minerals • In case of joint venture or technology collaboration agreement in the same field	• Greenfield airports • Construction & maintenance of infrastructure like ports, harbors, roads and highways • Power generation, transmission and distribution and power trading (atomic energy not permitted) • Mass rapid transport systems • Townships, housing, built-up infrastructure and construction-development projects

Hurdles to investment remain. Although India has a well-developed legal system, the current legal and regulatory environment sometimes acts as an obstacle to the necessary injections of foreign private capital into India's infrastructure. Major infrastructure projects are governed by the concession agreements signed between public authorities and private entities. Tariff determination and the setting of performance standards vary somewhat by sector. In the roads and highways sector, the ministry generally sets tolls – while in major ports projects, and many of those in electricity generation, an independent regulator will decide relevant tariffs. In the airport sector, a new independent regulator is planned for 2009 and is likely to play a major role in determining tariffs in concession agreements for the segment. In some instances, ministry or regulator control over potential proceeds can act as a disincentive to the private infrastructure developer.

As is the case in many countries, there is no single regulator which formulates the policy for all infrastructure projects. There is also no standardisation in the concession agreements across the different infrastructure sectors. As a result, the development of certain sectors in India may be hampered due to lack of adequate and co-ordinated planning. Projects which are approved may face difficulties if related projects are substantially delayed. One example is Bangalore's new international airport, one of the largest PPP projects to date. The project is facing growing pains related to insufficient road and rail connections to the new facility, in part due to delays of expected high-speed rail and highway projects under the auspices of other government bodies.

Opportunities

What segments present the best opportunities for E&C companies? The Planning Commission of India has planned extensive expansion in the roads and highways, ports, civil aviation and airports, and power infrastructure segments – all of which provide substantial opportunities for E&C companies.

Roads and highways

India's roads are already congested, and getting more so. Annual growth is projected at over 12% for passenger traffic and over 15% for cargo traffic. The Indian Government estimates around US$90 billion plus investment is required over FY07-FY12 to improve the country's road infrastructure. Plans announced by the Government to increase investments in road infrastructure would increase funds from around US$15 billion per year to over US$23 billion in 2011-12 (see Figure 2). The quantum of funds invested as part of these programmes will significantly exceed that invested in recent history. Such programmes would be funded via a mix of public and private initiatives (see Table 1).

The Indian Government, via the National Highway Development Program (NHDP), is planning more than 200 projects in NHDP Phase III and V to be bid out, representing around 13,000km of roads. The average project size is expected to US$150 million-US$200 million. Larger projects are likely to reach the US$700 million-US$800 million range. About 53 projects with aggregate length of 3000km and an estimated cost of around US$8 billion are already at the pre-qualification stage. The procurement process favours players with good experience and sound financial strength.

The opportunities do not stop there. More than 10 states are also actively planning the development of their highways. While the average size of these projects is smaller than the NHDP projects, most will still be substantial, in the US$100 million-US$125 million range. All told, more than 4,500km of state highways are likely to be awarded by the end of 2010.

Figure 2: Projected Investment in the Road & Highways Sector in the Eleventh Plan

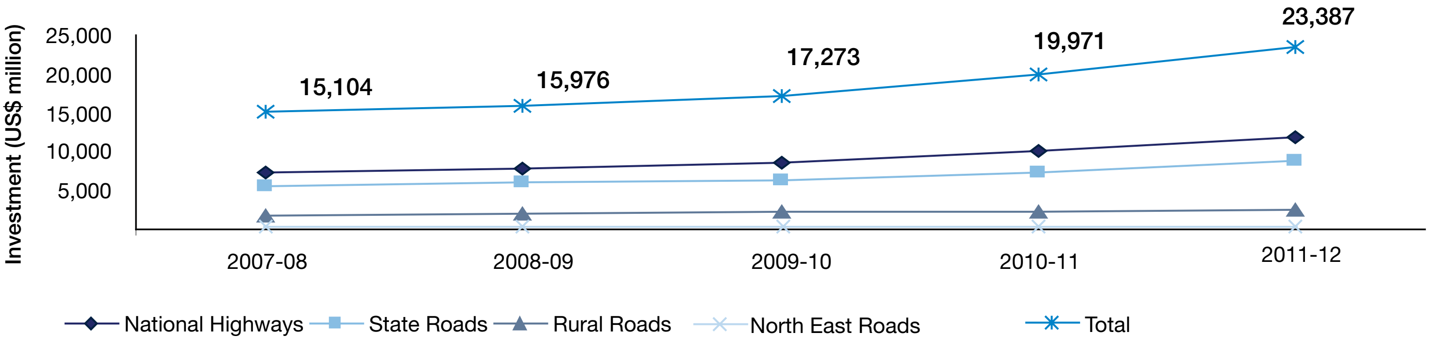

Table 1: Road Infrastructure Detailed Projections (US$ million)

	National Highways				State Roads (Highways, Major District Roads, Other Roads)			Rural Roads	North East	Total
Year	NHDP[1] Public	NHDP Private	Non-NHDP (Public)	Total	Public	Private	Total			
2007-08	3,173	3,702	463	7,338	4,347	1,333	5,680	1,875	212	15,104
2008-09	3,305	3,966	486	7,757	4,528	1,428	5,956	2,025	238	15,976
2009-10	3,464	4,495	510	8,469	4,745	1,618	6,364	2,150	291	17,273
2010-11	3,834	5,685	536	10,055	5,253	2,047	7,299	2,300	317	19,971
2011-12	4,707	6,478	563	11,747	6,488	2,345	8,834	2,463	344	23,387
Total	**18,483**	**24,326**	**2,557**	**45,365**	**25,361**	**8,771**	**34,132**	**10,813**	**1,401**	**91,711**

1 NHDP – National Highway Development Programme

Rail

The Indian Government has also recognised existing infrastructure gaps and capacity constraints in the rail system, and as a consequence plans large scale investment over the five years from FY07-FY12. Projected investments total US$65 billion, of which 40% is expected to be contributed by the private sector. One major PPP programme is already in its initial phases. The Dedicated Freight Corridor project is designed to alleviate congestion on the rail routes between Delhi and Mumbai and Delhi and Kolkota by building long-distance, cargo-only rail lines, at an estimated cost of US$6 billion-7 billion.

Other proposed initiatives include the development of manufacturing plants for rolling stock with long-term committed procurement for several years, and the setting up of logistics parks. City metro systems are also in the pipeline. The first corridor of the Mumbai Metro Project has already been awarded to Reliance Infrastructure and the Government has asked the final shortlisted companies to submit detailed financial bids for the second phase of the Mumbai Metro.

Indian Railways is also looking for private partners to help modernise railway stations to world-class levels, and for projects focused on increasing connectivity with ports.

Ports and airports

Increasing connectivity with inland transport networks is just one of many challenges currently facing India's ports, which have seen massive swells in the amount of goods transported. Traffic is estimated to reach 877 million tonnes by 2011-12, and containerised cargo is expected to grow at 15.5% (CAGR) over the next 7 years. India's existing ports infrastructure is not sufficient to handle the increased loads – cargo unloading at many ports is currently inadequate, even where ports have already been modernised. An estimated investment of around US$22 billion is targeted for port projects in the five year period from FY07-FY12. The National Maritime Development Programme includes 276 projects, with a required investment of about US$15 billion over the next ten years, with private investment targeted at around US$8 billion. In addition to improving road and rail connections, projects related to port development (construction of jetties, berths, container terminals, deepening of channels to improve draft, etc.), will provide major opportunities for E&C companies. Recent deregulation of the sector now permits 100% FDI, and an independent tariff regulatory authority has been set up to facilitate projects at major ports.

Air traffic has increased rapidly in recent years, although this slowed in 2007. While a number of Indian airlines have faced challenging market conditions in 2008, and the rate of growth is likely to be significantly less than initially projected, Indians are still flying in much greater numbers. Estimates made in 2007 by the Indian Government's Committee on Infrastructure suggest that passenger traffic will grow at a CAGR of over 15% in the next 5 years. Indian manufacturers are also looking to the skies – the same source anticipates that cargo traffic will grow at over 20% p.a. over the next five years.

Even if these estimates prove somewhat optimistic, the growth already achieved has put tremendous pressure on airport infrastructure. The Indian Government has projected that an investment of around US$8 billion in the five year period from FY07-12 will be needed to help cope with additional demand, and private sector participation is expected to play a key role. The private sector has already stepped up to the challenge of airport infrastructure development in several cases, with private participation in recent years at Delhi, Mumbai, Hyderabad, Cochin and Bangalore supplementing the efforts of the Airports Authority of India.

The Government has proposed the establishment of an Airport Economic Regulatory Authority (AERA) to promote efficiency, competitive pricing and a customer-focused service. State governments are also getting involved and looking to facilitate the development of new airports. The total investment on new airports has been proposed at about US$10 billion by 2012. Greenfield airport projects are planned in resort destinations and emerging metros such as Goa, Pune, Navi Mumbai, Greater Noida and Kannur. Further, 35 non-metro airports are proposed for development. Prequalification of bidders for development of Amritsar and Udaipur airport has already been completed, and bids for 10 non-metro airports are scheduled to be invited shortly.

As the density of airports increases in various regions, increased competition is likely to bring new issues into focus, such as corporate performance management. Airports will look to diversify their revenue sources through the development of city-side infrastructure. Airlines will also be looking for new technology solutions to maximize revenues and reduce costs. MRO (Maintenance, Repair & Overhaul) facilities could therefore also present new business opportunities.

The need for improved aviation infrastructure extends beyond the construction of new airports – existing metro airports also require significant modernization and upgrading. EPC contractors are expected to be sought for Chennai and Kolkata airports in the immediate future.

Power

Increased manufacturing activities and a growing population are also causing a surge in power usage. India has the fifth largest electricity grid in the world with 135 GW capacity, and the world's third largest transmission and distribution (T&D) network. Large investments are needed to meet growing demand and provide universal access. The policy and regulatory framework is pro-investment – shifting away from 'negotiated and guaranteed' to 'open and market competition'. Given the increased competition, diversity, and number of opportunities, project and collaboration risk must be more carefully assessed and managed.

An investment of US$167 billion is projected for electricity projects in the five year period from FY07-FY12. The massive number and scope of potential projects has attracted a number of new investors, lenders and operators. All new awards are through open, competitive bidding. A rush is on to develop new assets, harness natural resources, and attract global finance – but an industry focus and strategy is necessary to properly tap into this opportunity.

E&C companies may want to consider involvement in the construction of power stations, and T&D networks, particularly if sustainable building and generation technologies can be leveraged. The Indian Government is also looking to encourage the generation of wind and solar power by providing generation-based incentives to those companies who do not claim accelerated depreciation, so E&C companies with experience in building these types of alternative energy projects may find excellent opportunities.

Public private partnerships

Funding India's wide-ranging, US$500 billion programme of infrastructure expansion over a five-year period is likely to be beyond the means of total government funding, so policies have been designed to facilitate private investment to the maximum level possible.

If the Indian Government's targeted level of private sector involvement and investment are met (approximately 30%), the quantum of funding required would be around US$150 billion – dwarfing the investment achieved over the past decade by comparison. Achieving this level of investment is ambitious. Several frameworks and plans are already in place, however, that may facilitate reaching these goals.

The PPP/PFI market in India is still at a relatively early stage. However, over the past decade or so, there has been an increasing trend at the central as well as state government level to use PPPs for meeting critical infrastructure gaps. The results have been quite encouraging. Establishing a PPP is now considered to be the default option for major infrastructure projects in sectors such as roads, railways, airports, ports and other transport segments. First preference will be given to the PPP model, and only in cases where projects are expected to fail to attract private sector interest will more traditional models be considered.

Most infrastructure sectors have an overall long-term plan and programme that provides guidance on the projects that are likely to come up for development. Key policy frameworks for procurement of projects through PPPs have also been drafted. For example, the NHDP discussed earlier in this paper details a long-term plan for the roads and highways segment, with seven defined phases and largely clearly identified projects (along with project costs) and an agreed timeframe. The roads and highways segment also has a generally successful PPP model concession framework. The NHDP is mandated to a dedicated agency that also has clearly earmarked source of funding coming in to support the programme. Almost all the other sectors have similar plans.

Over the last 3-4 years, there has been a push towards expanding the scope of PPPs for the provision of urban infrastructure through establishment of another government programme for urban renewal across the country. This is likely to further increase the scope, scale and number of PPPs in the country.

Not surprisingly, international interest in Indian PPPs has soared in 2008, with over 50 international players showing interest in a variety of types of projects in the first three quarters of the year. Local players are also increasing their interest. Until recently, only a very limited number of large domestic players were fully conversant with PPP models and had the capability to deliver on them. However, local developers and contractors are catching up fast and domestic capacity has increased substantially in recent months.

E&C companies looking to participate in this burgeoning segment do face certain hurdles. The typical PPP project design and preparation process is still largely technically-oriented, with limited appreciation of the overall financial and commercial risk issues involved. Often information distortions in the market have led to large variations in the bids/ offers received during the procurement process. Further, the procurement process is often highly prescriptive, rather than participative. The emphasis is on conforming to public sector requirements, which may not offer value for money and does not encourage innovative solutions, rather than evolving the project configuration to be delivered over the long-term in a partnership approach.

And while the public sector is dictating the terms, it is quite often not willing to shoulder concomitant risk. The current concession structure is highly asset oriented, rather than focusing on service delivery. Private sector participants are often required to assume considerable risk, including demand risk, and the apportionment of risk is in some cases quite inefficient.

Financing for PPP/PFI projects can also be a key constraint, as long-term financing and instruments have been in scarce supply. PPP projects have so far been largely financed domestically using plain vanilla debt with relatively low gearing. Commercial banks are the major source of debt with generally short tenor (being about 50% of concession period). At the current time, it is difficult to predict how the financing situation will evolve over the short-term. Certainly, access to credit has become far more restrictive on a global basis, however if India's growth continues to outperform most other economies, it could emerge as a preferred destination for investment.

India has become an attractive PPP market and its attractiveness is likely increase in the future. Contractors able to negotiate and partner with the relevant ministries should find excellent opportunities, particularly companies with a longer-term view.

The tax environment for E&C companies investing in India

E&C companies looking to invest in India need to consider a variety of tax issues. Overall tax rates can be relatively high, so careful tax planning is vital. Some of the relevant taxes applicable to E&C companies are listed in Table 2.

Transfer pricing regulations were introduced in India in 2001. Although transfer pricing regulations are a relatively recent phenomenon, the authorities have taken an aggressive stance. There is no advance pricing arrangement (APA) yet in India, so the implications of transfer pricing remain somewhat uncertain.

The Government's strong focus on promoting infrastructure development also extends to tax policy, with a number of policy measures and incentives now in place for the construction of infrastructure facilities, including a numbers of tax holidays, although Minimum Alternate Tax (MAT) of 11.33% may be payable on book profits during this period. Relevant tax holidays, their applicability, and the eligibility of each infrastructure sector are detailed in Table 3.

Structural considerations for developers

Dividends paid by an Indian company are subject to a Dividend Distribution Tax ('DDT') of around 17%.

In February 2008, the Finance Minister announced some relief whereby a dividend paid to a parent company by its subsidiary would not be liable to DDT, subject to prescribed conditions. Earlier, corporates had a lean structure with one company having many divisions catering to different businesses.

Following the recent change in DDT, many corporates may be considering restructuring their corporate structure so that different business streams have separate Indian operating companies with one common Indian parent. While such types of structuring may help the parent company to unlock shareholder value and should not impose any additional levy of DDT, it should be noted that introducing a new corporate layer at the Indian level will bring the shares in the Indian operating company within the Indian capital gains tax net.

Additionally, even if DDT is not due on dividend payments, there would be an up to 10% cash trap in the Indian operating

Table 2: Types of taxes which may be applicable for E&C companies operating in India

Nature of tax	Governing Authority	Rate of Tax (in %)
Income Tax	Central Government	33.99
Fringe Benefit Tax	Central Government	33.99
Custom Duty	Central Government	Up to 31.70
Excise Duty	Central Government	Up to 14.42
Service Tax[1]	Central Government	12.36
Sales Tax/Value Added Tax ('VAT')[1]	State Government	4.00 to 12.50

[1]India is planning to implement a unified goods and service tax (GST) in 2010 at a rate still to be determined.

Table 3: Overview of tax holiday terms for various infrastructure segments

Sector	Applicability	Time-frame	Eligibility
Power	• 'Undertaking' which generates power • 'Undertaking' which transmits or distributes power • 'Undertaking' which carries out substantial renovation and modernisation[+]	• 10 consecutive years out of 15 years	• All the above should commence ([+]complete) before March 31, 2010
Ports & Airports	• Indian companies developing and/or operating & maintaining ports and airports • Applicable also to Inland waterway, Inland port, Navigational channel in the sea	• 10 consecutive years out of 15 years	• 'New' infrastructure facility • Agreement with government/ statutory body
Railways	• Indian companies developing and/or operating & maintaining rail system	• 10 consecutive years out of 20 years	• 'New' infrastructure facility • Agreement with government/ statutory body
Roads & Highways	• Indian companies developing and/or operating & maintaining roads and highways • 'Roads' – includes toll roads, bridges • 'Highways' – includes housing or other integral activities	• 10 consecutive years out of 20 years	• 'New' infrastructure facility • Agreement with government/ statutory body
Water	• Includes water supply project, water treatment system, irrigation project, sanitation and sewerage system or solid waste management system	• 10 consecutive years out of 20 years	• 'New' infrastructure facility • Agreement with government/statutory body

companies, as in accordance with Indian regulatory provisions, only 90% of a company's distributable reserves may be paid as dividends.

Therefore, a construction company working on multiple projects in India should consider all relevant factors bespoke to their requirements before structuring their operations.

International tax considerations

Effective tax structuring into India is vital as this impacts on how attractive a project is to target investors and has a direct influence on the net internal rate of return. It is therefore particularly important that international investment opportunities are structured appropriately to take into consideration tax, accounting, regulatory and legal aspects. We have outlined below some of the key areas to consider.

Entry and exit strategy

Holding company location – Appropriate planning in respect of a holding company jurisdiction is necessary to minimise Indian withholding tax and Indian capital gains on the sale of shares in Indian companies.

Financing – In order to introduce debt into India, there are various issues that need to be considered such as the Indian External Commercial Borrowings rules, withholding tax issues on distributions out of India and the availability of a tax deduction for the distribution at the Indian level.

Holding the investment

Permanent Establishments – One of the risks with managing investments in India is managing the Indian permanent establishment position, where if the Indian tax authorities successfully argue that there is an Indian permanent establishment of the foreign operations in India, then there maybe significant adverse tax implications. It is therefore important to carefully manage the operations carried out at the Indian level. In practical terms in the E&C industry, activities generally take a long duration to complete, and hence PE clauses (especially fixed base and service PE) come into play in this industry more often. Table 4 details common types of PEs and their considerations.

Cash and profits repatriation

Profit repatriation – There are various options on repatriating profits from the structure, such as dividend distributions, share sale, capital reductions, etc, all with differing tax impacts.

Engineering, procurement and construction (EPC) contracts – onshore versus offshore

In the E&C industry, the execution of projects is undertaken substantially by way of an engineering, procurement and construction (EPC) contract. A typical EPC contract will have the following scope of work in a single project:

- Supply of equipment (offshore and onshore)
- Installation/commissioning
- Services (offshore and onshore)
- Software/technology transfer (offshore and onshore)

Under a typical EPC contract, a non-resident contractor performs a multitude of activities. The scope of work under an EPC contract would include both onshore and offshore activities (see Figure 3). Taxability of payments received by foreign companies under EPC contracts has become a matter of great debate and litigation. Onshore supplies and services are normally taxable in India. Offshore supply of goods and services under a composite contract are something of a grey area. The Indian revenue authorities often attempt to bring the entire EPC contract, including the offshore supplies and services, within the range of taxes in India. The tax authorities may cite a business connection in India, and also note the presumed indivisibility of EPC contracts.

Nonetheless, some recent landmark judicial rulings with regard to EPC contracts in India suggest that tax outcomes for each of the components of the contract must be determined independently. These rulings have brought about a general principle that profit from offshore supplies would not be taxable in India, subject to the following conditions:

- Principal to principal transaction
- Title (i.e. risk and ownership) in the offshore supplies passed to the buyer on high seas (outside India)
- Sale consideration is received outside India
- Sale is at arm's length

Although the above rulings suggest that offshore supply and services may not to be taxed in India, the taxability depends on the specifics of each case. Further, the revenue authorities have not accepted the above rulings and the matter is pending before the higher judicial authority. E&C companies should take care to structure contracts in a tax efficient manner, taking into account the particulars of each project.

Higher depreciation – what lies ahead?

In order to make infrastructure projects more attractive for companies and investors, the Indian Government is re-examining the existing depreciation policy for such entities. The infrastructure sector may be eligible for a higher rate of depreciation in book value for BOOT (build, own, operate, transfer) projects. The Government is still examining this proposal and also evaluating whether depreciation should be allowed or, alternatively, there could be a policy for amortisation of the entire expenditure for such companies. Private players are needed to invest in infrastructure projects on the BOOT basis, and in the future, infrastructure companies may benefit from the creation of a sinking fund by such companies for the concession period. Such a fund would depend on the life of the project and the concession period could vary widely, depending on the contractual conditions of the specific project.

Indirect tax issues

The majority of the E&C services rendered by a company in India are subject to either service tax, VAT, or both, depending on whether the services rendered by E&C companies are in the nature of a construction contract or service contract. Apart from the above, there are certain other indirect tax issues which need to be addressed appropriately, especially relating to contract structuring. Companies need to ensure that indirect taxes are taken into account as they make decisions around how to structure a particular project.

Figure 3: Elements of a Typical EPC Contract

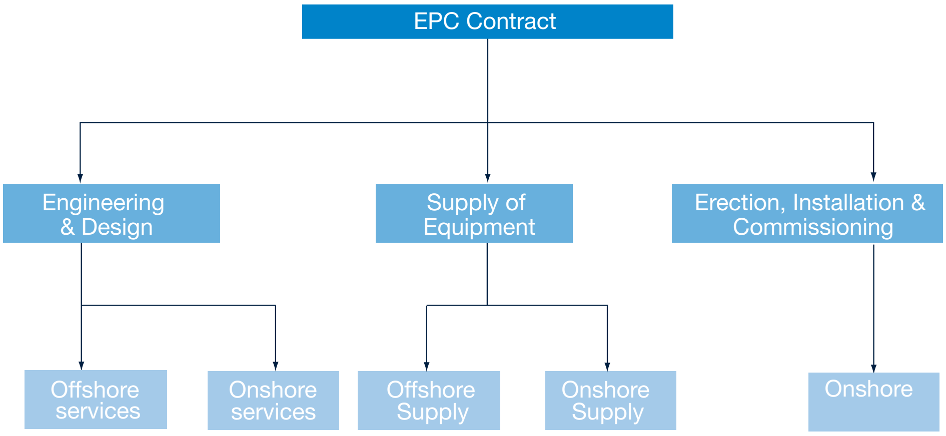

Table 4: Types of Permanent Establishments, when they occur, and issues to consider

Type of PE	Occurs when a foreign company:	Issues to consider
Fixed base PE	Has a virtual presence in India, either by way of a branch office or any other manner which depicts a virtual presence in India.	Implications should be known prior to establishing a project office in India.
Agency PE	Has a dependent agent in India	Ensuring that an Indian company does not act as a dependent agent for the foreign company.
Service PE	Renders services in India through its employees or personnel for a period aggregating more than a specified period in any twelve month period, although this depends on the specific terms of each tax treaty.	Planning of international assignments to ensure that employees do not stay in India for a period exceeding the specified period.

Challenges for local players and foreign companies looking to enter the market

"Foreign firms do not get their own infrastructure to execute projects, such as skilled manpower, plants & equipments and construction materials etc. They usually try to employ locally available resources in order to cut costs."

Quote from a Government representative

Without doubt then, there is huge opportunity in the Indian infrastructure space in the short- and medium-terms at least. The policies of the Indian Government, which have been evolving very rapidly in recent years, continue to encourage the private sector in taking on a larger and more diverse role – from being an infrastructure builder (under a publicly financed arrangement) to an infrastructure developer (under PPP structures which include private finance). These developments have led to a large number of infrastructure projects open up as opportunities for the private sector.

Considering the liberal FDI guidelines, these lucrative projects present both an opportunity and a threat to local players. In many cases, foreign players are believed to have greater technological expertise, deeper pockets and more extensive experience compared to domestic companies. These advantages could mean overseas companies winning work at the expense of local players, or partnering with them. Domestic E&C companies may therefore look at foreign entrants in the market as tough competitors – or as strong potential partners.

If most of the forecasted projects go ahead as planned, there should be more than enough work for everyone. Wharton Business School's 2007 analysis of India's construction boom pointed out that the proposed US$50 billion infrastructure spend per year in India is nearly two and half times the current turnover of the entire existing domestic construction industry (US$15 billion and growing fast), and that many of the major E&C companies have massive order backlogs. Wharton also flagged talent shortages as an issue in key skilled trades such as fitting, welding, masonry and plumbing – so drawing on the talent pool of foreign partners may help in supplementing and training local tradesmen. India is also facing shortages of construction equipment and machinery.

Domestic production of equipment and machinery is ramping up fast, but in the short term, a foreign partner may be able to help fill in any gaps. There are many factors that influence the role of the local players vis-à-vis foreign players – for example, the criteria used for the selection of developers is an important influencer on what role the foreign players will take. Risk-sharing on a PPP project also needs to be carefully considered. The revenues of most infrastructure projects in India will be denominated in the local currency. Foreign players will need to consider the currency and tax issues already mentioned in some detail, particularly on a PPP project where significant private investment is also sought.

International EPC contractors, including Toyo Engineering, Jacobs H&G, Uhde, Tecnimont and Aker Kvaerner, are already leading players in India. At the same time, many Indian companies e.g. Larsen & Toubro (L&T), Gammon, Bharat Heavy Electrical Limited ('BHEL'), Engineers India Ltd and Thermax have either scaled up their skill sets or extended their operations to overseas projects.

India has a very well established infrastructure developer market. Local firms have evolved in recent times into fully-fledged national players (and in some cases international players). In certain sectors, such as highways, power and water, the local firms also have significantly progressed on the technological front. Some of the India-based companies such as L&T, Punj Lloyd, Reliance, GMR, Suzlon, Tata Power, etc. are very active in the international markets and thus, can no more be deemed 'local' E&C companies. Indeed, they are global organisations based out of India. These and other large firms clearly look at foreign players as both partners and competitors. However, smaller and medium-sized infrastructure construction companies and developers (such as KMC, Nagarjuna, IVRCL, Gammon, etc.) are often happy to partner with foreign players without necessarily considering them as competitors.

The recent guidelines issued by the Indian Government for the selection of PPP developers have also led to a slightly distorted behaviour in the local marketplace. The guidelines favour larger players, even when the project investments and execution can be easily carried out by mid-sized companies. This has led to situations where many of the small/medium-sized local players are looking at partnering with the foreign players primarily for the purpose of getting qualified and winning the job, rather than to actually bring in investment or expertise. It is expected that such behaviour will soon change as the guidelines become more reflective of market dynamics and mid-sized Indian companies mature.

Foreign players looking to enter into the Indian marketplace and team with local players need to evaluate carefully the cost competitiveness of their prospective participation. India has witnessed huge interest from a number of foreign infrastructure companies in the past, but not many have really been able to offer a cost-competitive proposal. Since India has evolved its own model of cost competitive delivery in many sectors (for example, in telecoms), local players have an incentive to work with foreign companies only if the partnering offers a competitive edge over other bidders. There have been few such success stories so far where the foreign player has offered a particularly cost-competitive product or service. In instances where we have seen the successful entry of foreign players (such as in the port sector), foreign companies have often been able to bring technology or management advantages, or expanded reach into international markets, to supplement the capabilities of local partners.

"Foreign companies offer an excellent opportunity for a comprehensive tie-up to win projects and share the spoils. An attendant benefit is the transfer of technology to us at the end of it all."

Quote from an Indian E&C company

"Entry of foreign players needs to be viewed as a positive development to add value and state-of-the-art technology to our highway projects. These firms will bring with them greater expertise in areas of highway construction technology, project management, project implementation and monitoring expertise as well as technology transfer. The resultant benefits include savings in cost, time and improved quality of works, to the benefit of all."

Quote from a Government representative

"Let us tie up with foreign companies from countries where we intend to do business in. While we can help them enter India, they could help us in expanding our business outside India in countries where they operate."

Quote from an Indian E&C company

Building a sustainable future in India

Whilst the need for greater infrastructure investment is clear, equally important is the need to sustainably manage such investments. The Indian Government's success in infrastructure provision will be measured not by the quantum of funds invested, but on how infrastructure contributes to the achievement of India's economic, social and environmental objectives. Importantly, infrastructure investment should be considered as a means to an end, not an end in itself.

Challenges in infrastructure provision are not unique to India. Uncertainty, scarcity of available funds for investment, and competing priorities present challenges to all governments in infrastructure planning and delivery. Sustainability requires that future generations are not compromised by the investment decisions of current generations. Sustainably managing infrastructure through the appropriate pricing, funding and prioritisation frameworks is important to ensure the benefits that accrue from the significant investment that India is currently making in key social and economic infrastructure are maximised.

Global climate change creates further challenges. New infrastructure must not only support social and economic goals, it must also do so within acceptable environmental parameters. In our analysis *The World in 2050: Implications of global growth for carbon emissions and climate change policy*[2], we set out a number of possible scenarios for climate change based on projected growth rates. In only one of the scenarios, 'Green growth + Carbon capture and storage (CCS)', were emissions held to levels that are broadly considered to be 'acceptable' by climatologists.

Given that India's growth rate is likely to continue at high levels, it is important that considerations of issues such as fuel mix, encouraging more fuel efficient modes of transport such as rail, and the possible use of CCS technology, come fully into discussion and are implemented whenever possible.

In our view, it is imperative that debate on the issue of sustainability in infrastructure provision is heightened and that the challenge that it presents is effectively met. Government and infrastructure agencies will also need to retain sufficient focus on issues of feasibility and prioritisation when the primary focus shifts to delivery.

E&C companies looking to bid on major projects need to ensure that they are taking a holistic approach which incorporates sustainability issues into the design of the project, both in the planning and the delivery stages. Those that do so have a unique opportunity to make a major difference in a growing economy while enhancing their own bottom line.

[2] Available to download at www.pwc.com

Concluding thoughts

Although it may not always be easy to navigate the plethora of views, opinions and perceptions expressed by various local stakeholders, a vast opportunity exists for foreign contracting companies looking to invest in Indian infrastructure. Already, a number of contractors from Europe, Australia, China, Malaysia and Korea have made their presence felt in India. Further, many E&C companies, particularly from Japan, Spain, France and the UK are also now aggressively looking out for opportunities to enter India for business.

Overall, the opportunities to develop a significant business in India are extremely promising for E&C companies, if they have carefully selected strong local partners, structured contracts sensibly to maximise tax benefits where appropriate, and taken a long-term, sustainable perspective. Foreign companies who do not acknowledge the opportunity in good time may miss out on a critical opportunity to establish a long-term presence in one of the world's largest growth markets.

Further reading:

Other publications from PricewaterhouseCoopers relating to the E&C industry are available to download free of charge at www.pwc.com/e&c

International Mobility in the Engineering & Construction Industry

In this paper, we take a close look at trends and best practice across the E&C industry with regard to moving people to work abroad. We draw on interviews with 24 companies in the sector from around the globe, covering areas such as international assignment policy, compliance, reward, cost effectiveness and talent management.

PwC Annual Global CEO Survey – E&C summary

A summary document containing the highlights from our interviews with over 50 CEOs and executives within the sample who were from E&C companies. We compare the results of their responses with the global average across all industries – with some interesting findings.

Global Economic Crime Survey – E&C industry supplement

Examines the views of over 300 E&C industry executives and compares and contrasts their thoughts with those of their peers across all industries, as well as with E&C executives' views from our 2005 survey. The results suggest that E&C executives need to take economic crime more seriously.

Building New Europe's Infrastructure – Public Private Partnerships in Central and Eastern Europe

Explores the current developments and future opportunities within the infrastructure sector of the CEE region. In the paper, we outline the opportunities in infrastructure projects in CEE, EU funding, challenges and key success factors on bidding and delivering on projects in CEE – a region requiring significant infrastructure investment.

Building Knowledge

A quarterly series of short papers on highly topical issues for E&C companies, hitting directly to the heart of the business issue addressed.

Additionally, further reading on investing and operating in India, including the following, is available to download at www.pwc.com/in

Destination India

Gives potential foreign investors a bird's eye view of the tax and regulatory framework in India. A foreign investor looking at investment opportunities in India, needs to decide its entry strategy and business model while bearing in mind the gamut of Indian laws and regulations impacting such foreign investment. The publication attempts to provide an introductory summary of the policies, laws and regulations in India and a guide to the more important aspects of doing business in India

Buying into India

Highlights a number of opportunities and challenges for investment in India with a particular focus on Industrial Products, setting out the significant variations from state to state in terms of the labour market, quality of infrastructure, and governmental attitudes to investment amongst other things.

India Spectrum

This quarterly newsletter encompasses a summary of recent important judicial and legislative developments in the field of direct tax, indirect tax, transfer pricing, exchange control regulations, and mergers & acquisitions.

PricewaterhouseCoopers expertise in the E&C industry in India

In India, PricewaterhouseCoopers has extensive experience of working with E&C companies and has a dedicated group of over 350 professionals advising clients in the industry. The infrastructure team works closely with our Real Estate, PPP & Government practices. Our knowledge management programme focuses on the building of close networks and the sharing of information and expertise. Our assignments in all regions of the sub-continent have included both private and public sector clients.

We have played an integral part in the evolution of the highways sector, serving as a thought leader for the NHAI & Department of Road Transport and Highways. We have assisted NHAI in the award and financial close of 35 projects (total length of about 1700km) and cost of around US$3.5 billion. We also assisted the NHAI in the preparation and finalization of the Model Concession Agreement being used for NHAI Projects. Other projects include: Review of Model Concession Agreement (MCA), BOT Toll agreement & BOT Annuity agreements, OMT (Operation Maintenance Transfer) agreements. Further, we assisted the NHAI in evaluating various development models for National Highways and are assisting State Governments in various aspects of policy formulation for the road sector.

Our team has also advised both public and private entities on aviation issues, spanning from work on the concession agreement for Bangalore International Airport and advising the Airport Authority of India on a feasibility study of five non-metro airports, to bid support for a development project in Mumbai, to advising the AAI/Ministry of Civil Aviation on formulating cargo policy.

Our experience in the area of ports development includes advising on some of the first port projects on a PPP basis, providing bid advisory and financial close assistance and strategic advice to large Indian/international port developers, as well as advice to key logistics player in strategic investments and valuations for ports. We are currently advising a government ministry on the development of an international container trans-shipment terminal.

PricewaterhouseCoopers experts were also involved in the first rail BOT project in India. We have experience advising railways on PPP structuring options for railway projects and have also advised on assignments for PPP structuring/ bankability studies. We are also advising the Ministry of Railways on strategy formulation for the development of manufacturing facilities for rolling stock.

As PPP projects are still relatively new to India, there are many taxation issues which are either evolving or still to be determined. Therefore, adopting the correct tax position is important. Although there are various tax incentives provided to infrastructure companies, greater focus is required to optimise the utilisation of tax incentives. Further, there are various other important issues such as permanent establishments and the taxability of EPC contracts, which need to be considered at the time of entering into a contract.

Tax is also a key cost component. It is imperative that companies structure their contracts in order to achieve tax optimisation. Good tax planning can have a potentially decisive impact, especially in the bid process, and can provide a clear competitive advantage. PricewaterhouseCoopers was named 2007 India Tax Firm of the Year by *International Tax Review* (ITR) magazine.

Key contacts for E&C in India:

India E&C leader

Ravi Bhamidipati
ravi.bhamidipati@in.pwc.com
+91 (22) 6669 1308

Advisory

Amrit Pandurangi
amrit.pandurangi@in.pwc.com
+91 (124) 4620 517

Vishwas Udgirkar
vishwas.udgirkar@in.pwc.com
+91 (124) 4620 557

Tax

Girish Mistry
girish.mistry@in.pwc.com
+91 (22) 6689 1433

Hemal Zobalia
hemal.zobalia@in.pwc.com
+91 (22) 6689 1466

International tax

Raj Julleekeea
raj.julleekeea@uk.pwc.com
+44 (0)1895 522 398

Our Engineering & Construction industry practice is comprised of a network of more than 4,000 industry professionals located in over 50 countries around the world.

Our Global E&C network – recognised for its industry credentials and extensive expertise – is focused on providing services to contractors, housebuilders, building products companies, professional and support services companies, governments as well as to private and public sector clients of the industry.

PricewaterhouseCoopers provides industry-focused assurance, tax, and advisory services to build public trust and enhance value for its clients and their stakeholders. More than 155,000 people in 153 countries across our network share their thinking, experience and solutions to develop fresh perspectives and practical advice. Our specialised services to the E&C sector include contract dispute resolution, acquisitions, PPPs, cost reduction and structuring.

An in–depth understanding of key industry issues and practical experience of working with our clients are central to the delivery of our services to E&C companies. Many of these issues drive our programme of publications and thought leadership for the sector.

"PricewaterhouseCoopers" refers to the network of member firms of PricewaterhouseCoopers International Limited, each of which is a separate and independent legal entity.

Global & key regions

Global Leader
Jonathan Hook
+44 (20) 7804 4753

Asia
Simon Neill
+85 (2) 2289 2334

Europe
Guillermo Masso Lopez
+34 (91) 568 4353

Middle East
Keshav Choudhary
+973 (39) 911 458

US
Kent Goetjen
+1 (860) 241 7000

E&C territory leaders around the world

Australia
Peter Le Huray
+61 (3) 8603 6192

Belgium
Jan Vanfraechem
+32 (2) 710 7239

Brazil
Felipe Ayoub
+55 (71) 3243 1913

Canada
Michael Clifford
+1 (416) 869 2399

Chile
Guido Licci
+ 56 (2) 940 0019

China
Thomas Leung
+86 (10) 6533 2838

Czech Republic
Jiri Koval
+420 (251) 152 044

Denmark
Jacob Fromm Christiansen
+45 (0) 3925 3295

Finland
Eero Kivi
+358 (0) 9 2280 1934

France
Louis–Pierre Schneider
+33 (0) 1 5657 8023

Germany
Martin Nicklis
+49 (721) 8400 2351

Hong Kong
Simon Neill
+85 (2) 2289 2334

Hungary
Baki Erdal
+36 (1) 461 9195

India
Ravi Bhamidipati
+91 (22) 6669 1308

Ireland
Paraic Burke
+353 (0) 1792 8655

Italy
Giorgio Greco
+39 (02) 7785 319

Japan
Ken Moriwaki
+81(03) 6266 5735

Luxembourg
Serge Saussoy
+352 (49) 4848 3056

Mexico
Javier Garcia
+52 (0) 55 52636129

Netherlands
Gerard Bergers
+31 (10) 407 5846

New Zealand
Craig Rice
+64 (9) 355 8641

Norway
Knut Grotli
+47 (0) 95 26 01 26

Portugal
César Gonçalves
+351 (0) 213 599 436

Russia
Julia Tabakova
+7 (49) 5232 5468

South Africa
Diederik Fouche
+27 (11) 797 4291

Spain
Javier Lapastora
+34 (91) 5684 631

Sweden
Peter Lindstrand
+46 (8) 5553 3197

Switzerland
Willy Wenger
+41 (0) 58 792 6160

Thailand
Chanchai Chaiprasit
+66 (0) 2 344 1373

Turkey
Husnu Dincsoy
+90 (212) 326 6054

UK
Jonathan Hook
+44 (0) 20 7804 4753

Ukraine
Vladimir Didenko
+380 (44) 490 6777

US
Kent Goetjen
+1 (860) 241 7000

This publication is printed on paper manufactured from 75% recycled fibre and made using elemental chlorine-free pulp under a management system certified to ISO 14001. It was printed using vegetable-based inks.

Design hb02851