

GOING DOWN THE RIGHT ROAD

JULIEN TOUZOT OF EGIS, CHARTS THE SUCCESS OF THE COMPANY'S TOLL MOTORWAY INFRASTRUCTURE PROJECTS ACROSS THE WORLD, AND ASKS IF THE UK COULD TAKE A LEAF OUT OF THE INFRASTRUCTURE ENGINEERING AND DEVELOPMENT FIRM'S BOOK?

The earliest toll road concessions were in England, where a series of laws were passed in 1706 to allow the formation of toll road companies (the 'turnpikes'). By the 1820s Britain had 40,000km of toll roads run by more than a thousand companies, covering virtually all main routes and many secondary roads.

Later, in the 20th century, France emerged as the world's largest investor-owned toll highway network and it pushed ahead rapidly with new routes. The French toll motorway companies¹ have now more than 47 years of experience in the development, financing, construction, commissioning, and operation and maintenance of a network of more than 7,600km of motorways, representing some 90% of the French network, and covering all types of environment. The total turnover of these companies is over €5bn, representing more than one billion toll transactions each year.

Drawing on its internal market experience, French toll road developers quickly extended their business around the world, contributing to the rapid growth of the toll road project finance sector. The main factors that facilitated this included:

- an urgent need for new infrastructure, especially in the developing countries;
- the trend towards privatisation; and
- a higher tolerance of risks by the various parties reflected in lengthening financing terms, lower banking margins adaptation to different and sometimes difficult legal and regulatory regimes.

This article is based on the extensive knowledge acquired by Egis in the various approach of structuring toll motorways concession.

GENERAL FEATURES OF TOLL MOTORWAY PROJECT FINANCING.

Toll motorways share with all other infrastructure projects the fact that they are ultimately about the provision of services to the public. Unfortunately, this provision of services is rarely appreciated by the road users, who often consider tolls a payment for a right that they should get for free. Services provided by toll motorway concessionaires are, however, real, even if they are not

BACKGROUND: GROUP EGIS

Groupe EGIS has grown since 1970 into one of the largest infrastructure engineering and development firms in the world. From its original and privileged shareholding encompassing Caisse des Dépôts – Développement (C3D), part of Caisse des Dépôts et Consignations (CDC), and seven semi-public motorway companies, Egis has drawn upon an extensive local knowledge from its French business and applied it to a global model applied primarily to the road development business.

Since the end of the 1980s, the group has been involved in over 50 toll concession schemes worldwide in various roles (developers, operators, designer, project manager and client's adviser).

Within Groupe EGIS, EGIS Projects is in charge of developing and implementing concession/BOT/PPP projects relating to roads and motorways and other types of infrastructure. EGIS Projects has acquired a wide experience in developing, implementing and operating motorway concessions, from a simple manually-operated inter-urban motorways in developing countries to the multi-lane freeflow electronic tollways in the developed world.

always obvious. For example, some low-cost eastern European bus tour operators that consider the free use of showers on service areas to be an interesting opportunity to avoid expensive hotels.

The provision of services is crucial in addressing another important factor when considering toll roads: the social acceptability of tolls. Because of the high visibility of tolls, governments are likely to regulate them, introducing a political risk component for private operators. Moreover, because a toll's social acceptability is very much dependant on country specifics, such as local purchasing power and any precedent in the country of tolling, it adds further uncertainty to the estimation of the traffic risk, and hence the project's cashflows, which often leads to difficulties in financing toll roads. To implement private toll concession projects, governments have adopted different approaches to tolls and as of today, two traditions co-exist:

- **The hard, or real, toll tradition**, whereby tolls are collected directly from the users. This can be done manually, automatically, or

electronically, and the operation has to be organised in consequence. This approach stems from the principle that anyone that uses the motorway should pay for the privilege. Users therefore become direct clients, wanting value for their money and having higher expectations about the level of service than on the shadow toll projects detailed below. Hard-toll projects also necessitate that a free alternative road remains available for users who cannot pay the toll and are prepared for their journey to take longer and less convenient, which in turn introduces competition risk.

- **The shadow-toll tradition**, mainly developed in the UK and Portugal. Here, the concession company gets paid directly by the state grantor, in the UK the Highways Agency, based on the traffic flows on the road. These tolls are invisible (or 'shadow') to the users, therefore removing the social acceptability aspect and part of the traffic risk, while placing more emphasis on the state grantor's ability to pay.

Shadow toll projects resolve the social acceptability issue, but they remain subject to the following features common to all toll motorway concessions:

- a back-ended cashflow profile heavily dependant on traffic mix (ie proportion of cars, HGVs, coaches etc), traffic growth factors and the tariff increase mechanism;
- potential currency mismatch between local revenues and foreign currency loans;
- infrastructure risks, such as interconnection/ingress and egress points;
- infrastructure dimensioning, maintenance and provision of level of service to cope with the varying demand; and
- environmental risk, and possibly geotechnical risk.

All the above-mentioned features lay the ground for understanding the main philosophies that have emerged to structure toll motorway project financing and presented below.

STRUCTURING ISSUES

Over the last decade, Egis has experienced different structuring and procuring approaches to toll road projects in the countries where it operates. Certain recurring issues faced by both public and private actors have often emerged from a misunderstanding of the key following philosophies and from inappropriate measures adopted to structure them.

THE TOLLING PHILOSOPHY. Trying to answer the question 'which toll system is more appropriate for a given project/environment?' is complex and needs to take account of the project/environment specifics. This means, in particular, looking at toll optimisation and acceptability, technical feasibility, traffic management constraints, and certainly incorporating sufficient technical flexibility for implementing new commercial strategies in the future.

The various technical tolling systems that have been implemented throughout the world range from the simple vehicle counting equipment to the most complex freeflow electronic toll systems. All these systems have in turn required a number of conditions to be feasible, such as adequate market segmentation, a developed banking system and a tailor-made legal framework.

Furthermore, choosing the 'hard-toll' option will imply flexibility in the toll prices regime to reflect the inherent need for road concessionaires to design specific tolling products for each segment of the market, rather than just considering fixed class of vehicles.

Whereas occasional users normally have no problem with flat rates, frequent users and commuters may well be more sensitive to the tolling regime if they end up paying the full rate for frequent very short trips. Taking a more extreme and theoretical position, where the concessionaire is not deemed to be in a monopolistic situation, the public sector may even give full flexibility to the private players to set whatever prices that the market is ready to accept. This *laissez-faire* approach does not, however, take into account public and strong political interests to these socially-sensitive schemes.

THE OPERATION AND MAINTENANCE PHILOSOPHY. Toll road operation remains largely a set of services provided to the road users, including the provision of a clean and safe motorway, a clearly-defined but flexible commercial policy and other services providing value for money to its clients. Because operational services remain heavily dependant on the traffic flows and market segmentation, it is of a paramount importance to get the early involvement of an experienced road operator. This will ensure maintaining communication throughout all project phases in order to stay tuned to the market – that is, propose and develop a package feasible from an operational perspective, that is cost-effective and tailored to the market.

Another particular issue that justifies bringing on board an experienced operator is the crucial need for the concession company to secure its revenues. Supporting the concession company with updated fraud, theft, customer management and relationship procedures is a pre-requisite for toll-road implementation and operation success. It is only made possible through an in-depth understanding and track record in this very business, as well as a continuous review and audit to catch up with a constantly-moving environment.

Because each project has its specifics, it is difficult to establish detailed operational requirements and service levels at the initiation of the project. It may therefore be more efficient for the public sector grantors to focus primarily on fundamental technical and safety requirements and leave the private sector to adapt its experience within this framework, rather than copying operational and service level requirements across from other projects.

THE DESIGN AND CONSTRUCTION PHILOSOPHY. Building a toll motorway within the framework of a concession project is definitely more than just pouring concrete and laying asphalt in accordance with public works technical specifications. Because the motorway is required to be 'fit for its purpose', which means it will oblige the operator to comply with the agreed level of service of operation, liaison between the public sector grantor and the private sector concessionaire, operator and contractor is required in order to integrate all parties' requirements into a single package. Furthermore, contractual procedures need to be polished to allow for any variation that may be required during the project implementation phase.

The main challenge here is to find the appropriate mix that will allow the public sector to keep sufficient control over the project evaluation, implementation and operation phases while giving the private sector enough leeway to propose innovative solution so as to provide value for money and speed of delivery to the granting authorities and ultimately to the road users.

Coming back briefly to the variation issue, one should also bear in mind the importance of a real understanding of risk allocation. As a particular instance illustrating this issue, it is not uncommon to hear the public sector say that "the motorway concession company wishes to retain as less risk as possible" – that is, limiting its scope to the

traffic risk. However, taking the traffic risk also implies taking risk to vary specifications, that results from higher or lower actual traffic than originally forecast. Understanding a risk allocation means analysing and understanding all underlying consequences thereof.

THE FINANCING PHILOSOPHY. Financing terms granted to toll motorway projects reflect

- the inherent uncertainty over the future cashflows;
- the back-ended cashflow profile; and
- probably some element of past experience based on previous motorway project developments.

It should be noted that the financial market has adapted well to financing toll roads over the years, providing financial products fitted to the projects' needs, for example, indexed-linked bonds and tailored hedging instruments. In their turn, project developers have become more sensitive to tailoring project structures to make them more bankable. The project's structure should also be flexible enough to cater for a future refinancing of the project if future operating experience or changes in financing terms are favourable. Security packages shall in turn be tailored to suit each actors' specifics.

Balancing all these factors to produce a structure that satisfies all parties is a task where the experience and track record of the project's sponsors is often more crucial than the application of sophisticated models

COMMUNICATION AND FLEXIBILITY

KEY FACTORS IN STRUCTURING A SUCCESSFUL DEAL. Rome was not built in a day and neither were the current complex project finance deals. Even though in the past 10 years the sector has witnessed major improvements in the way toll road concessions are structured, if the ideal concept can be achieved, it is still some way off.

While developing countries are often blamed for an inadequate regulatory framework and non-transparent bidding processes, the heavily regulated environment and restrictive bidding processes seen in the developed world can sometimes prove equally as bad for innovation and obtaining value for money. An emerging danger is a trend toward over-standardisation of the requirements and specifications that have usually more to do with copying across references from previous projects than with the specifics of the project in question and its environment. There simply cannot be standard agreements and standard risk transfer mechanisms that suit any and all environments and there surely cannot be a standard technical specification.

Ultimately, all players must understand the project's specific attributes, its surrounding environment and its main philosophies. In that respect, communication between public real needs and what the industry can provide, as well as flexibility in the procurement rules only can help to pave the way towards realistically achievable projects fitted to their specific environments.

Julien Touzot is Project Manager with Egis Projects, a Group Egis company.

j.touzot@egisprojects.com

www.groupegis.com

Note

¹ The French Toll Motorways companies comprise of eight sociétés d'économie mixte concessionnaires d'autoroutes (or SEMCA, semi-public limited companies) and one private company (Cofiroute).