

# Transport Report: Israeli Template

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The \$1.35 billion Cross Israel Highway transaction is the largest and only the second project finance transaction completed in Israel. It is structured on a build, operate and transfer (BOT) model and achieved financial close in October 1999. The transaction combines international and domestic sponsors and financing and has the support of the State of Israel, despite three changes of Government, including the late Yitzhak Rabin, Benjamin Netanyahu and Ehud Barak.

This article will provide a description of the transaction and examine a number of interesting features of the Concession Agreement.

## Description of the highway

The Cross Israel Highway will consist of an 86 km toll road from Hedera to Gedera. The Highway will have up to four lanes in each direction, 13 interchanges, 80 bridge structures, 100 km of agricultural roads and a 400 metre twin-barrel tunnel. It is part of a planned 300 km highway to connect the Lebanese/Syrian border in the north to the Egyptian/Jordanian border in the south. The highway is of strategic importance to the State of Israel as it is intended to ease significant growing traffic congestion around Tel Aviv and assist with the development of the northern and southern parts of Israel.

The Cross Israel Highway will employ a state of the art electronic tolling system provided by Raytheon. The technology uses transponder and video recognition but no tollbooths or plazas. The principle technology involves electronic transponders which are placed inside a vehicle windshield and are detected by radio frequency readers mounted on overhead gantries located at set intervals to measure the distance travelled by a vehicle. As an alternative to the transponders, an optical character identification system is able to read licence plates and match the users identity for billing purposes. The technology facilitates increased capacity since vehicles operate without lane restrictions or stoppages and reduces land requirements for the Highway.

## History of the transaction

In 1992, the Government of Israel established Cross Israel Highway Limited (CIHL) as a state-owned corporation. CIHL was given the responsibility for implementation of the Cross Israel Highway. CIHL initiated the tender in 1995 which resulted in the award of a concession in February 1998 to Derech Eretz Highways (1997) Limited (DEC) from the State of Israel to finance, design, construct, operate and maintain the Cross Israel Highway pursuant to the terms of the Concession Agreement.

The sponsors of DEC consist of two Israeli entities and one foreign consortium. The two Israeli entities include Housing & Construction Holding Company, one of Israel's largest construction companies and Africa Israel Investments Limited (Africa Israel), a large Israeli investment company active in many sectors including construction. Although the Israeli participants, had no specific project finance experience, they both have significant construction experience and excellent market knowledge and contributed significantly to the tender and financing process particularly by interfacing with representatives of the State and the Israeli lenders.

The international consortium, Canadian Highways Investment Corporation (CHIC), itself a consortium consisting of Agra

Inc. (Agra), Armbro Enterprises Inc. (Armbro) and BFC Construction Limited (BFC), each significant Canadian construction and engineering firms, had previous technology experience having built the Highway 407 in Ontario, Canada. Since financial close, Agra has been taken over by Amec plc, a large UK construction company and Armbro acquired BFC with the support of Hochtief AG, one of the world's largest construction companies, which has made a significant investment in Armbro.

## Structure

### Debt

The financing of DEC was structured with 90% commercial debt and 10% equity. The commercial debt was provided through a New Israeli Shekel (NIS) syndicated loan facility with a NIS equivalent of \$850 million arranged by Bank Hapoalim and a \$-note purchase facility for \$250 million arranged by CIT Group (formerly Newcourt Capital).

The NIS syndicated loan consisted of two tranches. One tranche incorporated a sophisticated step margin that facilitated a lower toll in the earlier years of the project. The other tranche included a fixed rate for the entire term. The facility also included a 6.5-year interest roll up. The facility was indexed to Israeli CPI and was based on a term of 28 years with 29% of the facility repaid after 20-21 years. The facility was syndicated to domestic banks and an Israeli pension fund.

The note purchase facility necessitated a rating of BBB- by Standard & Poors. Prior to financial close, the fixed rate pricing of the facility had to be adjusted due to adverse conditions in emerging markets. The term of the facility is 28 years. John Hancock participated along with CIT Group in this facility which is subject to further syndication.

Significant protections for the senior lenders were incorporated into the deal structure through the use of numerous reserve accounts, and the commercial debt is essentially secured by charges over all of the assets of DEC (including accounts and the Concession Agreement), as well as the shareholder equity and subordinated debt. In addition, the various lending groups entered into intercreditor arrangements, and arrangements with the State regarding termination of the Concession Agreement were incorporated to the satisfaction of the lenders.

### Equity

The 10% equity to be contributed by the sponsors will be based on actual construction costs. This formulation required a complex adjustment mechanism to ensure the appropriate contribution was made at all times. The equity was itself split into 2% share capital and 98% subordinated debt. The funds were originally contributed at financial close by way of \$120 million bridge loan to DEC backstopped by sponsors' letters of credit. Proceeds of the letters of credit will be used to repay the bridge loan essentially at construction completion. As a result of various reserve requirements and a 10-year block on dividends, equity returns for the project are back ended. In addition, the sponsors are required to backstop certain performance securities for DEC under the Concession Agreement.

### Construction

Construction services will be provided to DEC by a construction joint venture consisting of the sponsors or their affiliates pursuant to the terms of a Construction Agreement. The Construction Agreement was structured such that the technology agreement has been entered into directly between the construction joint venture and Raytheon.

The Construction Agreement consists of fixed price, lump sum, date certain turnkey contract. It provides for construction to be completed six months prior to the construction completion deadline in the Concession Agreement and liquidated damages in the event of late completion.

The construction joint venture obligations were supported by joint and several sponsor guarantees, letters of credit, a surety bond, a retention letter of credit and a mobilisation letter of credit. The Construction Agreement also contained a partial revenue guarantee whereby the construction joint venture guarantees a certain level of revenues during the construction period.

This structure of the Construction Agreement effectively allows DEC to pass construction and design risk to the

construction joint venture.

## Operation

DEC is obliged to operate the Highway for the term of the Concession Agreement and has entered into an Operation and Maintenance Agreement with an Israeli company owned by the sponsors or their affiliates. The Concession Agreement requires that the operator be independent from the concessionaire and arrangements have been structured to facilitate this requirement.

## Service Stations

In accordance with the terms of the Concession Agreement, DEC entered into a Service Stations Operation and Maintenance Agreement with Alon Israel Oil Company, an affiliate of Africa Israel, for the construction of four service stations along the route of the highway.

With that very brief review of the structure of the Cross Israel Highway transaction, the balance of this article will focus on a number of features of the Concession Agreement which had a significant impact on the transaction.

## The Concession Agreement

The Concession Agreement included the key features which allowed the successful financing of the Cross Israel Highway, but it also included some new concepts which presented challenges both to the lenders and the sponsors in terms of risk management.

Since the principal source of revenue for DEC is derived from the tolls, protecting against revenue or traffic risk was a prominent feature of the Concession Agreement. Through a combination of the length of the term of the concession, a revenue guarantee, toll adjustments and stringent enforcement mechanics, the State provided sufficient support to facilitate the successful financing of the Highway.

The Concession Agreement provided for a term of 30 years. This term was effectively reduced by three months to compensate for the length of time between the award of the concession and financial close. However, this period still extended beyond the term of the financing.

The partial revenue guarantee incorporated in the Concession Agreement requires the State to share in the traffic risk but also allows the State to share in the economic benefits from higher traffic volumes. If forecast revenues exceed actual revenues, the State will pay 80% of the difference to DEC. Alternatively, if actual revenues exceed forecast revenues, DEC will pay 57% of the difference to the State. This complex mechanism requires semi-annual payments with annual adjustments.

Four different mechanisms were used to effect toll adjustments. The toll fixed in the Concession Agreement is adjusted at the opening of the whole toll road to reflect the actual cost of borrowing on the basis of agreed tables. The toll is also indexed to inflation and exchange rates. Real tolls are increased with a constant real rate to reflect the general economic growth of the country. Finally, the toll is adjusted every three years to reflect the difference between reference and actual revenues.

Since the technology used in the Highway eliminates the need for barriers to facilitate management of toll collection, the State enacted strict enforcement mechanisms. These enforcement mechanisms may result in impounding vehicles for users who default on their payment obligations. While untested, these enforcement mechanisms attempt to address some of the difficulties faced in connection with enforcement on the Highway 407 in Ontario, Canada, which employed similar technology. In addition, the Highway users have price incentives for using the transponder technology which allows automated billing based on a system of preregistration and bank or credit card debits. As well, a simplified charging structure has been adopted whereby users are charged based upon a minimum of three and a maximum of five out of nine sections travelled per journey and based upon the category of vehicle (trucks and large vehicles, cars or motorcycles).

A further major risk for the transaction was eliminated by the State assuming responsibility for procuring land, clearing sites of antiquities and historic and religious significance and granting rights-of-use to DEC.

The Concession Agreement also includes a number of features which benefit the State but which complicated the financing structure to varying degrees.

As part of the Concession Agreement, the State of Israel was granted options for up to 49% of the equity and subordinated debt of DEC. The exercise price is fixed in the Concession Agreement and the options are exercisable at any time during the term of the Concession Agreement. The State may also exercise its options such that it receives only the economic benefit of the equity and subordinated debt without becoming a shareholder or subordinated lender with consequent obligations. In addition, the State's options are freely transferable. These options resulted in very complex arrangements in an attempt to protect the shareholders returns and to provide comfort to the lenders as to the future identity of the stakeholders in DEC.

Another feature of the Concession Agreement requires DEC in certain situations to explore alternative financing structures to replace up to \$200 million of the NIS debt on more favourable terms. Any alternative finance must facilitate a lower toll rate and must not negatively effect certain parameters identified by the senior lenders and the return on equity. Unfortunately, the provision for alternative finance added a layer complexity to the finance documents.

The Concession Agreement also included a requirement to significantly expand the road when certain traffic triggers were met which is anticipated will occur a few years after completion of the Highway.

This expansion requirement had to be accommodated within the financing structure, which involved projecting a cost and creating a reserve fund. The reserve fund requirement contributes to back-ended equity returns for the sponsors but hopefully eliminates the necessity for new equity at a later period.

## Conclusion

History will probably judge the Cross Israel Highway transaction as a benchmark transaction for all future project finance deals in the State of Israel. The lessons gained will be used by the State, sponsors and lenders in future transactions, particularly in the infrastructure sector. All these factors resulted in a challenging and complex transaction which has deservedly been named Transport Infrastructure Deal of the Year for the Middle East by Project Finance and Infrastructure Deal of the Year for Europe, the Middle East and Africa by Project Finance International.

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