



Fiordland Link Experience Business Plan Review

Report prepared for:

Department of Conservation

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Summary

Introduction The Reviewer was engaged by the Department of Conservation (“DoC” and “the Department”) in December 2013 to review the October 2013 Business Plan for Fiordland Link Experience (“FLE” and the “Project”).

The purpose of the review is to give an opinion on the overall soundness of the business plan and the financial viability of the Project.

TRC Tourism assisted us with information on visitors to Milford, and an assessment of the tourism aspects of the Project.

DoC sought our opinion and comment on the matters discussed in turn below.

Business Plan soundness The October 2013 Business Plan is a very high-level sketch. It largely circumvents key business issues normally covered in a good practice business plan. Instead it markets a solution to the reader based on regional and industry economic benefits of a new attraction in Queenstown.

The Reviewer’s rating assessment is between ‘poor’ and ‘not adequate’. In the Reviewer’s opinion, the Business Plan:

Overly relies on assumptions about the potential market for the proposed service that are:

- Unsupported by market research.

- Based on old tourism data.

- Optimistic about the appeal of the proposed service.

Relies on an engineering assessment that is:

- At a preliminary planning stage and therefore subject to cost increases relating to advancing to an engineering design level.

- Five years old and therefore prone to material cost escalation.

- Does not assess significant potential costs (e.g., reinstatement, dedicated electric power supply assets and monorail vehicle specification).

Demonstrates little evidence of thorough planning of the ‘journey’ from a business idea to the successful establishment of a profitable business.

For these reasons, the Business Plan cannot be relied upon. The most pressing need to improve the Business Plan concerns the following:

- Market research on the size and customers’ willingness to pay for the proposed service’s attributes.

- A more advanced engineering assessment for the monorail track (construction and deconstruction), related and supporting infrastructure, and specification for procurement of the monorail vehicle.

- Evidence for market appetite for underwriting of the reinstatement bond requirements, and associated terms and conditions.



Business viability, achievability & risk

The financial modelling that accompanied the Business Plan provides a starting point for a financial model to represent the business over a complete investment cycle.

We have constructed a Discounted Cash Flow (“DCF”) model of the business over a 25 year horizon for the purpose of testing the viability of the business and its sensitivity to risk.

A standalone business is said to be viable when it occupies a place in the market that enables it over the long term to meet its obligations as they fall due, maintain, refurbish or replace its operating assets, and pay its capital providers a return on investment that meets their expectations. In a DCF analysis framework a business is viable when the business generates sufficient free cash flow to meet all future operating and capital expenses, and pay investors a return just equal to their weighted average required return on capital provided. This corresponds to a non-negative net present value (“NPV”) of expected future cash flows discounted at the weighted average cost of capital (“WACC”¹).

When the model’s parameters are set to those presented in the Business Plan, the NPV of free cash flows in constant 2014\$ terms is \$118 million. This is the Enterprise Value (“EV”). Thus, *prima facie* the proposed business appears viable. However, there are material differences between the Business Plan assumptions for the key parameters and realistic values. There are three categories of variation:

Variation in the cost of supplying the service².

Adding likely cost overruns, an allowance for working capital, fewer operating days, and dedicated power supply assets, means that the EV of the project lies in a range between negative \$41 million to \$118 million in 2014\$. The lower end of the range provides a realistic EV estimate.

Variation in the estimated patronage demand².

Adopting the TRC Tourism’s recommended scenario gives an range for the EV of negative \$336 million to negative \$441 million on 2014\$³.

The EV estimate remains large and negative even if \$159 million in 2014\$ is added back to represent the variation in the cost of supplying the service.

Variation from the cost of meeting contractual obligations.

The cost of providing assurance to the affected landowners depends critically on the availability of sureties willing to take on the reinstatement risk. Not being able to obtain an underwriter for the reinstatement bond means the Project will need to find \$275 million extra capital, reducing EV accordingly. If the Project is able to find a surety then the likely cost, based on current market rates, would be \$45 million in 2014\$.

The conclusion of this financial analysis is that the Project faces major challenges to becoming a viable business. Moreover the risks to the business are largely outside the Applicant’s ability to control, and hence are of major consequence:

¹ See Appendix A.

² Note, this EV estimate does not include any requirement for reinstatement bond to be lodged.

³ Note such large negative EV estimates really have little meaning in practise because no rational investor would commit capital to an undertaking in the expectation of destroying large amounts of shareholder value.



The biggest challenge is the sensitivity to the size of the potential market for the service.

The next biggest challenge is potential capital cost overruns.

Finally, it is our opinion that the Applicant will not find an underwriter for the cost of restoring the natural environment and will need to capitalise reinstatement bonds that are likely to be required by all the affected landowners.

We have considered whether a 'second mouse' might be able to operate the business after purchasing all the operating assets and consents for nil consideration. The answer depends on whether there is market appetite for a surety to underwrite the reinstatement bond requirements. If a surety could be found then there is a possibility that a second mouse could make the business viable after purchasing the business, assets and concessions for nil consideration.

Concession fee The Applicant proposes a fee arrangement calculated on 26.9 percent of the Applicant's revenue, net of commissions paid to wholesalers.

The concession payment is calculated by multiplying the concession base by the applicable concession rate.

The concession rate is a tapering scale of partial rates, as shown below:

Concession base	Rate
\$m	%
Up to \$5	7
Exceeds \$5 but does not exceed \$10	5
Exceeds \$10	1

This proposed fee arrangement is unusual in the respect that it declines as the business revenue grows: most similar commercial arrangements are either proportionate to revenue or increase as revenue and/or profitability grows.

Based on the Applicant's patronage assumption, the present discounted value of the concession fee to DoC would be \$2.6 million in 2014\$.

A more usual, principles-based approach is to base the concession fee on the value of the property rights transferred under the concession arrangement. Our Alternate concession fee proposal, based on such principles, is a two-part charge, as follows:

An occupation charge calculated at 6.75 percent of value of land under the easements and leases sought, reviewable five-yearly, payable monthly in advance. The estimate value of ground rent payable per annum in the period before the first review is \$25,780.

A business use charge of \$2 per passenger payable monthly in arrears.

The alternate fee proposal delivers revenue to DoC with a present value of \$4 million in 2014\$.



Restitution bond & sureties There are strong public policy grounds for requiring the Applicant to capitalise the risk that it may not be able to perform its obligations under the concession contract to reinstate the natural environment if the venture is unviable.

In the absence of a specific engineering assessment of decommissioning, deconstruction, removal and environmental restoration, we suggest using the estimated construction cost reduced by 15 percent for the scrap value of recycled material as a working estimate of such costs.

On this basis, the requirement for sureties from the Applicant in favour of all the landowners is between \$180 million and \$275 million.

DoC should seek a bond for a proportionate share this amount, and adjust it annually in line with changes in the relevant PPI series. Every 10 years the surety requirement should be reviewed to ensure it covers an assessed cost of deconstruction, removal and restoration. If the proportionate share is based on track length within the conservation estate then DoC should require 67 percent or \$120 million to \$180 million to be provided as surety.

As the Business Plan currently stands, we think the Applicant will find it difficult to give an underwriter enough confidence to take on the risk of a call on the bond.

Construction costs The Business Plan presents an estimate of \$210 million (in 2009\$) based on an engineering assessment undertaken in 2009 by Opus⁴. The draft Construction Management Plan (3 November 2011) also refers.

Civil works associated with the monorail track is the major component of the total estimated initial capital expenditure on the Project of \$243 million (2009\$).

Of secondary consideration is the procurement of a single articulated 160-seat straddle monorail vehicle with an estimate cost of \$13 million (2009\$). The Business Plan also isolates \$8.7 million for the construction of four terminals Queenstown, Mt Nicholas Wharf, Kiwi Burn and at Te Anau Downs.

Capital cost overruns and delays associated with transport infrastructure projects are commonplace, and large, which implies a significant element of inherent commercial risk for a business undertaking such a project.

The construction cost estimate presented in the Business Plan is five years old, and based on a preliminary planning assessment of the engineering requirements. Based on experience with rail infrastructure projects, cost overruns can be expected in the range of 34 percent and 45 percent. In our assessment we have used the higher figures, which are still low by comparison with per-kilometre construction costs for straddle monorail systems installed overseas.

From the preliminary planning assessment undertaken by Opus we have made estimates of the as-built construction costs, as follows:

An allowance of \$15 to \$20 million for dedicated power infrastructure assets.

⁴ Opus International Consultants Limited – Preliminary Engineering Assessment of Monorail Proposal, September 2009. See Appendix E of the Concession Application.



Using the methodology set out in *Flyvbjerg et al*⁵ we have estimated the likely cost overruns of the train-related civil works to be in the range of 34 percent to 45 percent.

For other capital costs we have indexed the figures in 2009\$ to 2015/16\$ using actual construction cost changes estimated by the Department of Statistics and forecasts published by the New Zealand Institute of Economic Research.

Even the resulting escalated capital cost estimate looks low on a per kilometre basis when compared to recent straddle monorail installations overseas. Our top end estimate at US\$4.6 per km compares with an average of recent installations at US\$19 million per km. There are reasons why the proposed track could have a lower per km cost than one built in a dense urban environment, but the large variance causes us to question the completeness of the proposed works scope.

The Business Plan does not address the cost of decommissioning, deconstruction and removal of the monorail track, service road and consequential environmental restoration. Thus, the deconstruction, removal and restoration costs are likely to be between \$180 million and \$275 million for the entire monorail track (\$3.7 million to \$5.7 million per km).

What we recommend

Ordinarily we would recommend that the Applicant be invited to review its work and resubmit a new business plan. However, there seems little prospect that the business idea could translate into a viable business.

Therefore, we recommend that the Department invite the Applicant to withdraw on the reasonable grounds that there is too remote a possibility of establishing a viable business for it to consider granting a concession.

⁵ See Section 6.