Democratic Socialist Republic of Sri Lanka

Ministry of Transport and Civil Aviation

Colombo Suburban Railway Project
Project Preparatory Technical Assistance

Financial appraisal
CTC Building

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egis

RDC Resources Development Consultants

ADB

REPORT COVER PAGE

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TABLE OF CONTENTS

LIST OF ABBREVIATIONS

ADB	Asian Development Bank
CAPEX	Capital Expenditures
CMR	Colombo Metropolitan Region
CMRSP	Colombo Metropolitan Region Structure Plan
CTC	Central Traffic Control SLR
CoMTrans	Colombo Metropolitan Region Urban Transport Master Plan Study
CSRP	Colombo Suburban Railway Project
DNS	Do-nothing Scenario
FIRR	Financial Internal Rate of return
FNPV	Financial Net Present Value
GDP	Gross Domestic Product
KPI	Key performance indices
LKR	Sri Lankan Rupee
LTE-R	Long-Term Evolution -Railway
OPEX	Operating expenditures
PPTA	Project preparatory technical assistance
SLR	Sri Lanka Railways
TA	Technical Assistance
TOR	Terms of Reference
USD	United States Dollar

GENERAL

1.1 Context

1. ADB's Country Partnership Strategy 2012-2016 aims at supporting sustainable economic growth by developing viable multimodal transport systems, including railways and the public transport system.

2. The ensuing project will be processed as a project loan; the scope being defined by this project preparatory technical assistance (PPTA) and project preparation including design and support for procurement and safeguards which will be provided under a proposed technical assistance loan (TA loan).

3. EGIS International in association with Resources Development Consultants (the Consultant), where selected to carry out the PPTA.

4. During the course of preparing the PPTA, the Consultant identified the need to assess potential development of intercity rail services and the capacity of the rail system in the suburban area of Colombo to cope with expected developments of suburban and intercity services. As per today, rail intercity services in Sri Lanka are limited. However, considering the current and expected future characteristics of road transport services especially in terms of price, journey time and comfort, a significant increase of rail modal share can be expected if suited services are being implemented.

5. Expected benefits include positive impacts on economic activities, the environment, and health of residents of Colombo Metropolitan Region (CMR), aligned with the Government of Sri Lanka's Strategic Plan for Transport Management in the CMR. The outcome will be improved transport capacity and service quality in the suburban railway network of Sri Lanka Railways (SLR).

1.2 Scope of the financial appraisal

6. The financial evaluation aims at determining the financial viability of the CTC building project for Sri Lankan Railways. Its methodology relies on the comparison of the two situations “with-project” and “without-project”, balancing costs and additional commercial revenues resulting from the project implementation, and providing financial indicators to assess the project viability.

1.3 Purpose of this report

7. The purpose of the present report is to realise the financial assessment of the new Sri Lankan Railways CTC Building.

INTRODUCTION

1.4 Main components of the financial assessment and general methodology

The **financial evaluation** aims at determining the sustainability of the project for the rail company Sri Lankan Railways. The financial evaluation balances investment and rehabilitation costs with benefits from renting offices.

The financial analysis relies on an incremental approach comparing a project scenario ("with project" situation) and a counterfactual scenario in which project is not realised: the reference scenario (or "without project" situation).The methodology used for this assessment will allow computing standard financial indicators such as the Financial Net Present Value and the Financial Internal Rate of Return.

1.5 Economic evaluation

The economic evaluation usually determines the profitability of a project for the society as a whole. The process takes into account factors which can be quantified, such as the construction and maintenance costs (CAPEX, OPEX).

The economic appraisal also takes into account so called "externalities", i.e. the cost of non-financial impact. In our case, the only identified benefit is that relocating part of SLR staff in the new building would eliminate the congestion experienced in the present Train Control Centre. However, due to the lack of information on this benefit, and other potential externalities (better working conditions, increased productivity…) it is not possible to undertake an economic evaluation for this project.

1.6 Definition of "with project" and "without project" situations

Due to the unavailability of data on previous SLR CTC offices (operating and maintenance costs, future utilization, potential rental revenues…), they are not considered in the "with project" and 'without project" situation. In this case, only the new CTC building costs and benefits are taken into account.

The new Central Traffic Control SLR consists in a 12–storey modern building, for a total of 48,000 square feet, in railway area close to Maradana Railway station (Colombo 10).

The objective is to house the Train Control Centre with related technical and engineering facilities including:

- Operating department, presently located in Railway General Managers premises,
- Chief Signal & Communication Engineers offices located in Colombo 09,
- Commercial Department and General Managers office

The Land area currently occupying these railway offices could also be released for property development activities (no detailed information available).

Some of the new CTC building empty office spaces could be rented to private companies, and other outside business entities (up to 3 storeys). This is estimated in the present report.

GENERAL ASSUMPTIONS

1.7 Key assumptions

Project lifespan

The financial appraisal is conducted on a 30-year period starting from the construction of the CTC building planned on January 1st 2020, and a 1-year investment pre-operation period. These are the durations usually considered for a building.

Monetary value

Monetary values are in 2016 USD, and following general methodology for evaluations, the present assessment does not take into account inflation, as costs, charges and revenues are indexed on inflation.

Discount rate

The discount rate is used in the financial (and economic) analysis of investment projects to discount costs and benefits, and reflects the opportunity cost of capital from an inter-temporal perspective for society as a whole. In other words, it reflects the social view of how future benefits and costs are to be valued against present ones. In this sense, every discount rate entails a judgement concerning the future and it affects the weight attributed to future benefits or costs. A positive discount rate indicates a preference for current over future consumption.

According to ADB Guidelines for the financial (and economic) analysis of projects, discount rate is set at 9%. Base year for net present value calculation is usually the year before the commissioning year, being in our case 2019.

Rental appreciation

Based on Jones Lang LaSalle report on Colombo office market ("Sri Lanka – Land of Real Estate Opportunities", May 2017), office market value had a 6-8% annual growth between 2016 and 2018. An average rate 7% is taken both to estimate the rise in construction/rehabilitation costs, and the increasing rental revenues, in the first 10 years of the assessment. To be conservative, a 2% increase is applied for the last 20 years.

1.8 Project costs

Investment costs

Construction costs are estimated at 14,000 LKR per square feet, representing a total of LKR 672,000,000 for 48,000 square feet (source SLR).

Rehabilitation costs

It is considered scheduled rehabilitation cost every 15 year (in 2034 and 2049), representing 25% of the initial construction cost (source EGIS). The 7% and 2% annual growth rates are applied to this rehabilitation cost.

Residual value

A residual value is recovered at the end of the 30-year financial assessment. It represents the potential value of the building on the office market. In our case, due to rehabilitation works that preserve the building in good conditions, residual value is taken as the initial construction cost, where the 7% and 2% annual growth rates are applied.

1.9 Project benefits

As mentioned in 1.5, only rental revenues are identified. From Jones Lang LaSalle report, potential office rental revenues in Colombo are estimated between 240 and 345 LKR per square feet. An average of 307.5 LKR per square feet is taken.

3 storeys out of 12 are expected to be rented to private entities. It represents a total of 12,000 square feet (source SLR).

Thus, the revenues from office renting are estimated at 44,280,000 LKR per year. The 7% and 2% annual growth rates are applied to these revenues

FINANCIAL ANALYSIS RESULTS

As a reminder, the financial assessment led in the study aggregates CAPEX, rehabilitation costs, residual value and office rental revenues. The discount rate for the new CTC project is set at 9% (ADB guidelines).

According to the financial assessment, the following table presents the two main financial indicators needed to assess the viability of the project, the Financial Net Present Value (NPV) and the Financial Internal Rate of Return (FIRR).

NPV (in LKR)	133 344 292
FIRR	10.50%

Based on these results, NPV is positive and FIRR is above 9%: the project is then considered financially viable.

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ANNEX: FINANCIAL ASSESSMENT SPREADSHEET

YEAR	COST	REHABILITATION	RESIDUAL ECONOMIC VALUE	RENTAL REVENUES	CASH FLOW	DISCOUNTED CASH-FLOW
0	- 672 000 000				- 672 000 000	- 672 000 000
1				47 379 600	47 379 600	43 467 523
2				50 696 172	50 696 172	42 669 954
3				54 244 904	54 244 904	41 887 019
4				58 042 047	58 042 047	41 118 450
5				62 104 991	62 104 991	40 363 983
6				66 452 340	66 452 340	39 623 359
7				71 104 004	71 104 004	38 896 325
8				76 081 284	76 081 284	38 182 631
9				81 406 974	81 406 974	37 482 032
10				87 105 462	87 105 462	36 794 289
11				88 847 571	88 847 571	34 431 353
12				90 624 523	90 624 523	32 220 165
13				92 437 013	92 437 013	30 150 980
14				94 285 753	94 285 753	28 214 678
15		- 364 878 200		96 171 469	- 268 706 732	- 73 770 220
16				98 094 898	98 094 898	24 707 139
17				100 056 796	100 056 796	23 120 442
18				102 057 932	102 057 932	21 635 643
19				104 099 090	104 099 090	20 246 198
20				106 181 072	106 181 072	18 945 983
21				108 304 694	108 304 694	17 729 269
22				110 470 788	110 470 788	16 590 692
23				112 680 203	112 680 203	15 525 235
24				114 933 807	114 933 807	14 528 201
25				117 232 484	117 232 484	13 595 197
26				119 577 133	119 577 133	12 722 111
27				121 968 676	121 968 676	11 905 095
28				124 408 049	124 408 049	11 140 548
29				126 896 210	126 896 210	10 425 100
30		- 491 078 017	1 964 312 070	129 434 135	1 602 668 187	120 794 922
					NPV (in LKR)	133 344 292
					FIRR	10.50%

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