APPENDIX II

INVESTMENT PROPOSALS 2015 - 2020

Priority Axis 1 : Upgrading and Purchasing Rolling Stock

Project / Programs	Level of Priority	Cost Estimate (Rs. Mn)	Status	Justification and Remarks
Procurement of DMUs 6 DMUU each having 2 power cars and 12 coaches, and 12 DMUU each having one power car, one dummy and six coaches	High	7800 6000	Last purchase were from China (S12) and India (S11), and it is recommended that priority be assigned to use any balances available to procure DMUs. Expected by 2016	To increase the inter-city passenger market of railways, long-distance express train service has to be expanded To secure greater railway modal share of commuter service, an exclusive DMUU based operation is desired
Procurement of passenger Coaches (160 Nos)	High	8000	Any balance in Chinese or Indian credit lines may be used for this purpose. Expected by 2016	To replace the existing old carriage stock, and to expand the night train services and mixed operations.
Repair and up grading of French built M9 Locomotives	High	200	Current availability is less than 30%. Waste to keep the others inoperable. Execution by 2016	This is a heavy haul locomotive, and it is possible to increase the availability to 80% with marginal investment
Procurement of oil tanks (30 Nos)	High	520.0	Any balance in Chinese or Indian credit lines may be used for this purpose. Expected by 2017	To increase the railway modal share of petroleum bulk transport to 70% by 2020.
Construction of new loco workshop and carriage workshop at Ratmalana	High	75.0	To be ready by 2017 (But, no action is in place yet)	To alleviate congestion at RML workshops.
Extension of Mligawatta yard lines to and within Sathosa siding to improve rolling stock maintenance	High	260.0	Railway land leased out to CWE to be re-acquired. Process has already commenced	Negotiation with Sathosa under way.
Re establishment of carriage building workshop at DMA	High	5.0	Request has already been made from the Army (present occupant)to release the premises	Plant was set up in 2009, but was never functional. This could be made operational with marginal investment

Improvement for existing railway network

Project / Programs	Priority Level	Cost Estimate (Apprx) Rs. Mn	Status	Remarks
Construction of Double track between Payagala South to Aluthgama [Length 10.4 Km]	High	2,080.0	Under way as last leg of the project launched in 1997	Undertaken by SLR. Completion expected by 2016
Construction of Double track between Peradeniya- Kandy [Length 5.9 Km]	High	1,200.0 (incl bridge)	Under way. Trace cleared from Kandy to Gopollawa gate	Undertaken by SLR. Completion of first stage expected by end 2015. A credit line to be used to procure material and the two bridges.
Construction of Double track between Polgahawela – Kurunegala[Length 21.5 km]	High	3,225.0	Was in priority list for some time	Material to be imported using a credit line and to be constructed locally, either by SLR or through local tender
Construction of Double track between Katunayake– Kochchikade [Length 12.6 km]	High	2,000.0	Was in priority list for some time	Material to be imported using a credit line and construction to be done locally, either by SLR or through local tender
Construction of Double track between Peradeniya – Gampola [Length 12.1 km]	High	1,815.0	Part of Kandy urban railway dev project started in 2008.	Material to be imported using a credit line and construction to be done locally, either by SLR or through local tender
Construction of Double track between Peradeniya - Kadugannawa[Length 9.3 km]	High	1,860.0	Part of Kandy urban railway dev project started in 2008.	Material to be imported using a credit line and construction to be done locally, either by SLR or through local tender
Strengthening of third line from Maradana to Ragama [Length 13.6 Km]	High	1,414.4	Soft soil improvement to be done.	To be undertaken by SLR, and completed by end 2016
Up grading / double tracking of KV line [Total length 61.2 km]	High	Estimate not yet available	Up grading is needed for the entire line. Double tracking up to Makandura suggested in the first stage.	Land acquisition is necessary, and could involve significant costs. Foreign financial assistance, preferably multi-lateral credit, may be solicited

Improvement of Colombo Port connection line [3 km], and Re-establishment of Orugodawatte Triangle [1 km]	High High	300.0 200.0	Port line train services and ICD operation , are identified as priority in UoM's Master Plan study	Reclaiming possession of railway land already encroached may be necessary. No funding mechanism has been identified yet.
Replacement of Old Kelaniya Bridge	High	1,350.0	An unsolicited offer is under negotiation.	The bridge is nearly a century old, and life span is ending by 2022. Thus, replacing the bridge is a priority.
Assessment of failures of slopes in upcountry railway lines	High	65.0	Not commenced yet	For carrying out a Geotechnical study and submitting of recommendation
Ballasting of tracks, welding of rails and improvements to drainage systems in Colombo Fort to Kalutara South, Ragama - Negombo and Maradana - Rambukkana sections [Length 291 km]	High	659.4	Only 50% of ballasting and welds considered.	To be undertaken by SLR
Procurement of Tamping Machine, Track Motorcars, Flash butt Welding Machines, mechanical crane(30tons)	High	1,400.0	No procurement process started yet.	These procurements are necessary for SLR to effectively undertake track maintenance, rehabilitation and new construction works.
Electrification of Colombo Sub-urban railway between Panadura-Veyangoda [Length 70 km x 2]	High	6,500 (as per feasibility done in 2008)	Found feasible through a study done jointly by IESL, SLR and CEB in 2008. A TEC appointed on an unsolicited offer submitted by a Chinese Company.	To be executed with foreign aid, and implemented jointly by the SLR and CEB with the technical support of IESL. Joint Cabinet Memorandum is being prepared
Construction of Double track between Kandy and Katugastota [7km], and New extension from Katugastota to Digana [18 km]	Medium	2,100.0 (incl bridge) 4,500.0	Priority identified by University of Moratuwa's urban transport development planning study	Land acquisition is required. A long bridge over Mahaweli river has to be erected. Foreign funding, preferably from multi-lateral sources, solicited.

Construction of Railway Triangle at Maho [Length 1.5 km]	Medium	225.0	Land acquisition and design work are in progress	
Construction of Ragama – Veyangoda third line [Length 22.0 km]	Medium	5,500.0	Required to ease traffic densities and to provide for electrification	Could be undertaken locally. A feasibility study necessary, to cover electrification project also.
Up grading of line between Maho–Anuradhapura [Length 66.4km]	Medium	6,905.6	Weak track needs repair	Materials to be procured from outside, and the project to be executed by the SLR
Up grading of track between Anuradhapura - Vavuniya [Length 49.4 km]	Medium	5,137.6	ERD sought Indian assistance. TEC appointed, but negotiations not yet started.	Indian proposal calls for closure of Jaffna line, and would cost USD 65 Mn (on pro-rata of USD 82 Mn for 63 km). SLR's estimate is USD 30 Mn (with contingencies and a margin) to be executed without closing the track. Importing material using the credit line and construction by SLR recommended.
Rehabilitation of Railway track Gal Oya- Trincomalee line [Length 70.2 km]	Medium	7,300.8		
Rehabilitation of Railway track Gal Oya- Batticaloa line [Length 123 km]	Medium	21,944.0		
Construction of Maradana-Ragama fourth line [Length 13.6 km]	Medium	2,720.0		
Replacement of FOT bridge at 01m. 40ch., other bridges and 03 nos. turn tables.	Medium	1,140.0	Offer under negotiation. Final price may vary	
Replacement of points and crossings Colombo Fort-Loco Junction (Maradana)	Medium	465.0	No of turnouts 150.	
Rehabilitation of dilapidated pier in Talaimannar for operation of passenger ferry service.	Low	Estimate not yet ready	Construction of new Pier is in the present Contract with IRCON (India), based on an unsolicited offer	Facility similar to that available at Rameshwaram end is recommended by CECB. Possibility of repairing existing Pier is being examined. Existing agreement needs amendment accordingly

Construction of New railway lines

Project / Programs	Level of priority	Cost estimate (Rs. Mn)	Remarks	
Construction of Matara-Beliatta –Katagaragama new railway lines [Total length Length 110 km; First phase to Beliatta : 27 km]	High	65,520.0	Completion of the first phase to Beliatta expected by 2016. An Un solicited offer submitted for Signaling system (Phase 01), TEC appointed	Land acquisition and Detailed designs on the second phase have to be undertaken. It is noted that this is a very project [Approx USD 10 Mn per km] and its is recommended to explore other options of implementation
Construction of new sub urban line Colombo – Avissawella via Sapugaskanda [Length 34.5 km]	High	10,350.0 (incl bridge cost)	Identified as priority by UoM led master plan. Track bed available up to Sapugaskanda	First phase to Sapugaskanda [8 Km] can be implemented easily with reclaiming encroached railway land. Feasibility and designs have to be done re second phase beyond Sapugaskanda.
Construction of new railway line from Kurunegala to Habarana [Length 79 Km]	High	23,700.0	Feasibility done. EIA under way. Detailed designes necessary	This connectivity shortens train travel time to Trincomalee and Batticaloa at least by 20%, and will connect Dambulla to railway network
Construction of new railway line Maho - Palavi [Length : 53 km]	Medium	10,600.0	At proposal stage. Feasibility study and design to be done	The line connects Wayamba hinterlands to rail network, and facilitates Norochcholai Coal power plant to access Trinco Port
Construction of new sub urban line between Dematagoda – Battaramulla [Length 10 km]	High	3,000.0	Trace identified via Kolonnawa. Light rail with same gauge preferred	Proposed as 1st priority among alternatives to provide mass rapid transit to Battaramulla in UoM led master Plan study. Feasibility study and design to be done
Construction of new sub urban line between Colombo and Horana , [Approx : 18 km, depending of from where to connect. Via Piliyandala also could be studied]	Medium	5,400.0	Feasibility has been established. Detailed design to be done	Connecting Horana to railway network also is identified as priority by UoM led Colombo Urban Transport Master Plan Study. It will also enable eventual circular link up to Ratnapura.

Connection of Ratnapura to Railway Network [Approx 50 km, depending on from where to connect]	High	15,300.0	Feasibility study being done by UoM.	Ratnapura had railway connectivity up to 1970s. Railway access to Ratnapura will enable connectivity to Walawe valley, Wellassa, and eventually to lik up to South and East as well.
Construction of new railway line from Batticaloa toPottuvil [Length: 101 Km]	Medium	30,300.0	Long standing proposal. Feasibility study and design to be done	This will connect South Eastern Sri Lanka to railway network, with possible extension to Wellassa. In the long run, this could be a link of circular connectivity via Embilipitiya and Ratnapura

Upgrading Signaling system

Project / Programs	Level of priority	Cost estimate (Rs. M)	Status	Remarks
Local technology development in railway signaling, telecom and train controlling	High		Newly identified priority	No scientific and accredited mechanism to entertain local initiatives in this area.
Replacement of existing signaling system Wadduwa - Rambukkana	High	13,195.0	Un solicited offer for WDA-MDA made by Alkmaar Railway, Australia; sent to NPD and ERD	This system, installed in mid 1960s is subject to frequent failures, and therefore needs urgent replacement
Replacement of old signaling system Polgahawela - Maho	High	3,185.0		With track being gradually upgraded, signaling is becoming a bottleneck
Up-Grading of signaling system Ragama - Negombo	High	3,185.0		
Provision of protection at unprotected level crossings	High		Installing based on a priority order	Crossings created by new roads crossing existing railways should be road/local authority's responsibility

Other Capital Investment Proposals [Need to be elaborated]

1. Intelligent transport solutions for the improvement of Sri Lanka Railways [such as GPS based train tracking, Computerised train operations and IT based operations planning, ticketing and seat reservation systems, etc]
2. Commercial development of railway property [with private sector]
3. Establishment of Special Purpose vehicles" to undertake rail based industrial and commercial ventures
4. Establishment of a National Railway Institute, covering both technical and operating aspects, linked with local and foreign academic / professional institutes to develop railway based Research and Development skills in Sri Lanka
5. Railway based industrial joint-ventures to exploit export markets