GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
RAILWAY BOARD.

BY FAX
SN 24

No. 98/Elect(G)/138/6

New Delhi, dated 29.05.06

Chief Electrical Engineers,
Central Railway, CSTM, Mumbai
Western Railway, Churchgate, Mumbai
West Central Railway, Jabalpur.
Eastern Railway, Fairlie Place, Kolkata
South Eastern Railway, Garden Reach, Kolkata
East Central Railway, Hajipur
East Coast Railway, Bhubaneswar
South East Central Railway, Bilaspur
South Western Railway, Hubli
Northern Railway, Baroda House, New Delhi
North Central Railway, Allahabad
North Western Railway, Jaipur
North Eastern Railway, Gorakhpur
Northeast Frontier Railway, Maligaon, Guwahati
Southern Railway, Chennai
South Central Railway, Secunderabad.
Integral Coach Factory, Chennai.
Rail coach Factory, Kapurthala.

Sub: Revised codal life of Assets.
Ref: Rly Bd's letter no. 2002/AC-II/10 dt. 24.5.06

Board's vide letter no. 2002/AC-II/10 dt. 24.5.06 have issued the advance correction slip no. 62 of Indian Railway Finance Code Vol-I (reprint edition 1998) Para 219 for revised codal life of assets. A copy of the same is enclosed herewith for information and necessary action please.

DA: As above.

(Sanjay Kubba)
Jt. Director Electrical Engg.(G)
Railway Board.

SN23

Government of India
Ministry of Railways
(Railway Board)

No.2002/AC-II/1/10

RBA No. 25/ 2006

New Delhi, Dated 24/05/06

1.General Managers/FA&CAOs etc.(As per standard list I)
2.All attached offices/subordinate offices (As per standard list II)

Sub:- Revised Codal life of Assets

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The matter regarding reassessment of codal life of assets has been under Board's consideration for quite some time. To reassess the codal/ service life of assets, a multi-disciplinary Executive Director's Committee was constituted. The recommendations of the committee have since been accepted by Board. Accordingly Advance correction slip no.62 amending Para 219/F-I detailing normal life of various classes of railway assets is placed below for information and necessary action.

Kindly acknowledge receipt.

DA: As above (9 pages)

Shivaji Rakshit
(Shivaji Rakshit) 23/5/06
Executive Director (Accounts)
Railway Board.

Copy to:

1. Dy.C&GA of India (Railways), Room No.224, Rail Bhawan, New Delhi. (with 45 spare copies).
2. GM/const./NFR, CAO/CE (Const.) /All Indian Railways.
3. EDCE (Plg.), EDCE(B&S), EDCE(G), ED/Track(M), ED/Track(P), ED/Track(MC), ED(Project), Adv.EE(RS), EDEE(G), EDEE(Dev.), ED(RE), EDFX-I, EDFX-II, EDF/S, EDF/B, ED/C&IS, EDME (Cg), EDME(Ft.), EDME(Tr.), EDME(W), EDME(Dev.), ED/Sig., ED(TD)
4. AC I (Comp.), AC III (6 copies), AC-IV, Code Revision, Accounts Inspection, Accounts Appropriation, Finance (Budget).

Shivaji Rakshit
(Shivaji Rakshit) 23/5/06
Executive Director (Accounts)
Railway Board

ADVANCE CORRECTION SLIP No. 62

Indian Railway Finance Code Vol.-I (Reprint Edition 1998) Para 219 :-

(i) Substitute table below Para 219 showing normal life of the various classes of railway assets with the following:-

(i) CIVIL ENGINEERING ASSETS

S.No.	Class of assets	Average life in years			
		ROUTES			
		A & B	C(Sub)	D	E
1. RAIL & FASTENTING etc.					
1.	Rail & Fastenings				
(a).	Rails	20	15	30	*30
(b).	Wooden Sleepers	10	10	10	*10
(c.1)	Metal sleepers (Cast Iron & Steel)	20	20	20	*20
(c.2)	Fittings steel trough	10	10	10	*10
(d).	Concrete sleepers	35	35	40	*40
(e).	Elastic Fastenings				
(i)	Elastic Rail clips	5-8	5-8	8-10	*8-10
(ii).	Rubber Pads/ Liners	2-4	2-4	4	*4-6
(f).	Switches	4	2/3	5	*5
(g).	Crossings	5	4/5	8	*8
2 (A). MAJOR BRIDGES					
(a).	Bridges work- Steel work	60			
(b).	Bridge Masonry	100			
(c).	Structures Steel	60			
(d).	Structure- masonry and cement concrete	65			
(e).	RCC Bridge Works	60			
(f).	Pre-stressed concrete-Bridge work	40			
(B). MINOR BRIDGES					
(a).	Bridges work-Steel work	60			
(b).	Bridge Masonry	100			
(c).	Structures Steel	60			
(d).	Structure- masonry and cement concrete	65			
(e).	RCC Bridge Works	60			
(f).	Pre-stressed concrete-Bridge work	40			
3. FOOT OVER BRIDGES					
(a).	Bridges work-Steel work	60			
(b).	Bridge Masonry	100			
(c).	Structures Steel	60			
(d).	Structure- masonry and cement concrete,	65			
(e).	RCC Bridge Works	60			
(f).	Pre-stressed concrete-Bridge work	40			
4.TRACK MACHINE (All Categories)		15			

*** The service life as indicated in the table is general life/service life for track components. However renewal/replacement will be subject to various criteria laid down in IRPWM about its condition.**

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(ii) **COMPUTERS AND OTHER IT SYSTEMS**

S.No.	Class of assets	Average life in years
1	Passive Networking equipt (viz.Network Cabling)	10
2	Larger Multiuser system (s) & Active Networking Equipt (viz. MIS systems including external storage systems and their inter connects)	6
3	PRS systems	4
4	Small Multi-user system(s) and Power Supply equipments (viz. Individual office LANs, UPS)	4
5	PCs	3
6	Secondary Systems (viz. Printers, Portable computers, Dumb Terminals)	3

(iii) **ELECTRICAL ASSETS**

S.No.	Class of assets	Average life in years
1.	Electric Locomotives	35
2.	EMU/Metro Motor Coaches	25
3.	EMU/Metro Trailor Coaches	25
4.	Over Head Power Lines	40
5.	Over Head Traction Line excluding contact wire	60
6.	Electric under ground Cables	30
7 (a)	Electric contact wire (Alm.)	25
(b)	Electric contact wire (Copper)	40
8.	Electric Power plant excluded oil engine driven	25
9.	Electric Plant above 25 HP	25
10.	Electric power plant oil engine driven (diesel)	15
11.	Overhead traction lines contact wire	40
12.	Electric Machinery others	30
13.	Electric Sub Station Building	50
14.	Water Cooler, Refrigeration, Air Conditioner, hospital and domestic appliance	5
15.	Internal wiring of building	10
16.	Switch Gear	25
17.	Instruments	25

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S.No.	Class of assets	Average life in years
18.	Electric Pumps	20
19.	Electric Lifts & Hoist	20
20.	Ceiling Fans	20
21.	Electric Battery charging set	15
22.	Flood Light Projection	10
23.	Battery lead Acid	4
24.	Coach wiring	12
25.	Carriage Fans	10
26.	Air conditioner Central unit –above 3 tons	10

B) Equipments required for replacement through DRF/ Sinking Fund.

S.No	Class of assets	Average life in years
27	**AC EQUIPMENT**	
(i)	25 KV Inverter	15
(ii)	AC Control Panel (As per F-I codal life is 12 yrs.	15
(iii)	Inverter Panel	15
28	**TL Power Equipment**	
(i)	4.5/18/22.75/25 KW Alternator (As per F-I codal life of Dynamo is 20 years)	12
(ii)	800 A.H.L.A Battery	4
(iii)	1100 AH VRLA (SMF) Battery	4
(iv)	Diesel Engine for Powers Car	15
(v)	Alternator for Power Car	15
29	**Electric Locomotive Equipments**	
(i)	All Electric rotating machines up to 25 HP used on Electric Locomotives, EMU's Coaches and for stationary items	12
(ii)	All Electric rotating machines above 25 HP and upto 750 HP used on Electric Locomotives, EMU's Coaches and for stationary items	12
(iii)	Traction Motor	18
(iv)	Traction Converters	18
(v)	Auxiliary Converters	18
(vi)	Control Electronics	18
(vii)	Tap-Changer	35
(viii)	Rectifier Block	18
(ix)	Traction Gears	12
(x)	Motor Suspension	12
(xi)	Bogies with Wheel	18
(xii)	Armature for Traction Motors	15

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S.No	Class of assets	Average life in years
(xiii)	Stator for Traction Motor	18
(xiv)	Commutator for Traction Motor	15
(xv)	Locomotive re-cabling	18
30.	Microprocessor based control and fault diagnostic system	12
31.	Speedometer cum recorder and monitoring system	10
32.	BA Panel	18
33.	VCB	18
34.	DBR(roof mounted)	9
35.	DBR(vertical mounted)	9
36.	Pantograph	12
37.	**TRD Equipments**	
(i)	Current/Potential/transformer	30
(ii)	Earthing system in sub-station etc.	15
(iii)	Lighting arrestor (Gapless type)	15
(iv)	Lighting arrestor (Convertor type)	15
(v)	Buster & Terminal connection	30
(vi)	Battery charger	15
(vii)	Relay (Electromechanical)	15
(viii)	Relay (Electronic)	15
(ix)	Instruments (Electrical)	30
(x)	Instruments (Electronic)	30
(xi)	Relay testing kit & other testing equipment	15

C). Equipments required for replacement through Revenue

S.No.	Class of assets	Average life in years
1	**Electric Loco Equipment**	
(i)	Armature for Traction Motor	15
(ii)	Stator for Traction Motor	18
(iii)	Commutator for Traction Motor	15
(iv)	Auxiliary Motor	18
(v)	Arno Converter	18
(vi)	Blower Impeller/Casing	10
(vii)	Locomotive re-cabling	18
(viii)	Power Cables	18
(ix)	Control Cables	18
(x)	Compressor with exhausters complete recondition /replacement	10/15
2	**AC Equipment**	
(i)	Compressor ACCEL/ CARRIER	10
(ii)	Sealed Compressor KCL make	5
(iii)	Sealed Compressor Maneurope make	8

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S.No.	Class of assets	Average life in years
(iv)	Compressor Motor DC	10
(v)	Compressor Motor AC	15
(vi)	Condenser Fan Motor (DC)	8
(vii)	Condenser Fan Motor (AC)	10
(viii)	Condenser Fan Motor (RMPU)	10
(ix)	Evaporater Fan Motor (AC)	10
(x)	Evaporater Fan Motor (DC)	10
(xi)	Evaporater Fan Motor (RMPU)	12
(xii)	Condenser Unit	8
(xiii)	Condenser Unit (RMPU)	10
(xiv)	Evaporater unit	10
(xv)	Evaporater unit (RMPU)	10
(xvi)	Mercury in glass thermostat	5
3	**TL/Power Equipment**	
(i)	4.5/18/22.75/25 KW alternator regulator	12
(ii)	Emergency 90 AH L!A. Battery	3
(iii)	120 AH VRLA (SMF) Batttery	4
(iv)	290 AH starting L.A. Batteries for Power Car	3
(v)	Power Car power panel	15
(vi)	Power panel (AC coaches)	15
(vii)	Pre Cooling cum battery charging transformer rectifier unit	12
(viii)	50 KVA 750/415 V transformer unit	15
(ix)	3 KVA 415/190 V transformer	15
(x)	Water Raising Apparatus (WRA)	5
(xi)	Water Boiler for Pantry	5
(xii)	Hot Case for Pantrv	5
(xiii)	Bottle Cooler cum deep freezer	5
(xiv)	Ventilation Blower Motor for Power Car	12
(xv)	Radiator for Power car	10
(xvi)	Radiator Motor for Power Car	15

(IV) MECHANICAL ASSETS

S.No.	Class of assets	Average life in years
	Machinery & Plant	
1	Machine Tools like Lathes, Planners, Drilling, Boring and Milling machines etc.	15
2	High Precision and special purpose machines like wheel Lathes etc.	15

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S.No.	Class of assets	Average life in years
3	Tool Room and Testing Laboratory equipment	15
4	Foundry and Forge Equipment	15
5	Heat Treatment Equipment	15
6	Cranes-EOT	25
7	Power Generation Machinery & Switches	15
8	General purpose light machinery e.g. band saws, floor grinder etc.	10
9	Air Compressors	15
10	Other miscellaneous machines e.g. light cleaning machines, test equipment in diesel sheds, workshops, depots & sick lines	15
11	(i). Construction Machinery	15
	(ii). Track Maintenance equipment	20
12	Station machinery e.g. weighing machines etc.	15
13	Miscellaneous machinery and equipment for hospital, offices etc.	10
14	Mechanical Weigh Bridges	15
15	Electronic in motion Weigh Bridges	08
16	Diesel Pumps	10
17	Welding equipment including diesel welding sets	10
18	Diesel refrigeration equipment	15
19	Material handling equipment like FLT, Lister trucks etc.	10
20	Traversers	25
21	Fuel Station Dispensation Equipment	10
22	Bulldozers and other earth moving equipment	15
23	Motor Boats	10
24	Hydraulic re-railing equipment	15
	ROAD VEHICLES	
25	Staff Cars including Jeeps	07
26	Light Motor Vehicles	10
27	Heavy Motor Vehicles	10
28	Tractors	10
	ROLLING STOCK	
29	Diesel Electric/ Hydraulic Locomotives	36
30	Diesel Engine	18
31	Shunting Locomotives	36
32	Steam Locomotives	40
33	Boiler and Tender	20
34	Steam Cranes	30
35	Diesel Hydraulic Cranes	25
36	Steel Body Coaches including DMUs/EMUs, Restaurant Cars etc.	25

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S.No.	Class of assets	Average life in years
37	Full Stainless Steel Body Coaches including DMUs/EMUs, Restaurant Cars etc.	30
38	Light utilisation categories of coaches (steel body) like inspection carriages etc.	40
39	IRS Coaches	30
40	Open Bogie wagons with air brakes and Casnub bogies	30
41	Bogie tank wagons with air brakes and Casnub bogies	40
42	All other types of Bogie wagons with air brakes and Casnub bogies	35
43	Open wagons with vacuum brakes and UIC bogies	25
44	Other wagons with vacuum brakes and UIC bogies	30
45	4- Wheeler wagons (open and covered)	30
46	4- Wheeler tank wagons (with plain bearings)	35
47	4-Wheeler tank wagons (with roller bearings)	35

(V) SIGNAL & TELECOMMUNICATION ASSETS

(A) SIGNALLING SYSTEM

S.No.	Class of assets	Routes	Average life in years
1.	Electrical/ Mechanical Signalling System	• Route-' A' • Route-'C'/Sub Urban section • Big Yards on all Routes	25 Yrs.
		• Routes- 'B' • Route 'D' • Route 'D'-special'	25 to 28 Yrs depending upon location & condition
		• Routes-'E' • Route 'E- Special'	30 Yrs
2.	Electronic Signalling system like SSI, Axle Counter, AWS, AFTC, IPS etc.		15 years or based on obsolescence.

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(B) SIGNALLING EQUIPMENT

S No	Class of assets	Life in terms of operations	Average life in years				
			Routes				
			A	B	C/ Suburban	D & D-Spl	E & E-Spl
1	Cranks and Compensators	50,000	2	2	1	4	4
2	Lock Bar Clips	1,00,000	3	3	3	5	7
3	Facing Point Lock with bolt detection	3,00,000	8	8	8	15	15
4	Mechanical Detectors	5,00,000	-	15	—	20	25
5	Circuit breakers	5,00,000	15	15	15	25	30
	Lever locks	-	7	7	7	12	15
6	EK Transmitter	-	10	10	10	15	15
7	SM's Slide Frame	-	30	30	30	30	30
8	Electric Point Detector & Reversors	-	15	15	15	20	20
9	Signal Machines	1,50,000	-	10	-	20	20
10	Signal Wire Transmission	-	3	3	3	3	3
11	Point Machine	3,00,000	12	12	7	15	15
12	Plug-in and Shelf type relays	10,00,000	25	28	25	28	30
13	Track Feed battery chargers	-	10	10	10	10	10

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S No	Class of assets	Life in terms of operations	Average life in years				
			Routes				
			A	B	C/ Suburban	D & D-Spl	E & E-Spl
14	Signal Transformers, Transformers	-	12	12	12	12	12
	Battery Chargers, DG Sets, Inverters,	-	10	10	10	10	10
15	Batteries	-	4	4	4	4	4
16	Block Instruments	-	25	25	25	25	25
17	Cable	-	20	20	20	20	20
18	Block Instrument Electro Mechanical	-	20	20	20	20	20

(C) TELECOMMUNICATION EQUIPMENT

S..No.	Class of assets	Average life in years
1	Microwave Equipment	12- 15 Years
2	Exchange & accessories including Telephone equipment	12-15 Years
3	Under Ground Cables	Quad}-20 Years PIJF}
		OFC -20 Years
4	Overhead alignment	25 Years
5	All other electronic/ wireless items including OFC equipment	12-15 Years
6	Cell Phones	5-8 Years
7	FAX	10 Years
8	Walkie-Talkie Sets/VHF	5-8 Years
9	Datacomm. Equipment, Routers, Modems, PCs etc.	5-8 Years

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