RC Card File Structure
Version 2.0

The RC application data will reside in EFs under the RC-DF, which is created under the MF. The RC-DF will contain the following EFs under it.

- Key file — File Id = AE02
- SE file — File Id = AE0C
- Registration Details File — File Id = AE03
- Personal Details File — File Id = AE04
- Vehicle Details File — File Id = AE05
- Endorsement File — File Id = AE06
- Axle Details File — File Id = AE07
- Vehicle Permit Details File — File Id = AE08
- Retro Fitting Details File — File Id = AE09
- Additional Information File — File Id = AE0A
- Details of alternative or additional Semi-Trailer(s) registered with an Articulated vehicle — File Id = AE0B
- Hypothecation details — File Id = AE0D
- Signature details — File id = AE0E

The sections below describe the FCP and the contents of each of these files.

Directory RC-DF

The directory RC-DF will have the following FCP.

TAG	LENGTH	VALUE	REMARKS
82	01	38	FDB ONLY
83	02	AE00	File Identifier
84	10	RC	DF Name
8A	01	01 or 05	LCSI. When file is created first, it will be in 01 state (creation). Later it will be turned into 05 (activated state)
8C	08	7F FF FF 21 21 21 21 FF	Security Attributes. AM Byte: 7F Delete File (Self): Never Terminate DF: Never Activate File: (SE#1) Deactivate File: (SE#1) Create File DF: (SE#1) Create File EF: (SE#1) Delete File (Child): Never

AB	0D	86 04 22 F4 22 F2 97 00 8401DA 9700	Security Attributes (expanded format) Command MSE Erase is: Never allowed Command MSE Store is: Never allowed Command PUTDATA never allowed.
8D	02	AE0C	File id of the SE file

Data objects:-

Field	Tag	Length	Value
Version	02C0	3	2.0
Registration no	02C1	**20**	**DL1ABC1234**
Horse Vehicle Registration Mark, if applicable	02C2	**100**	{"HV1":"NA"}
Date of Card Activation (KMS Date)	02C3	**4(BCD)**	**DDMMYYYY**

Key File EF2

The key file will have the following FCP.

TAG	LENGTH	VALUE	REMARKS
82	05	0C 01 00 15 04	FDB (Linear variable record internal EF) DCB (Write once, 1 byte Data unit) MRL (21 bytes) No. of records (4 keys)
83	02	AE02	File Identifier
88	01	10	Short EF id
8A	01	01 or 05	LCSI. When file is created first, it will be in 01 state (creation). Later it will be turned into 05 (activated state)
8C	06	6B FF 21 21 FF FF	Security Attributes. AM Byte: 6B Delete self: Never Terminate EF: (SE#1) Deactivate EF: (SE#1) Update record: Never Read record: Never

SE File

The SE file will have the following FCP.

TAG	LENGTH	VALUE	REMARKS
82	05	0C 01 00 0E 04	FDB (Linear variable record internal EF) DCB (Write once, 1 byte Data unit) MRL (14 bytes) No. of records (04 SE Records)
83	02	AE0C	File Identifier
88	01	60	Short EF id
8A	01	01 or 05	LCSI. When file is created first, it will be in 01 state (creation). Later it will be turned into 05 (activated state)
8C	06	6B FF 21 21 FF FF	Security Attributes. AM Byte: 6B Delete self: Never Terminate EF: (SE#1) Deactivate EF: (SE#1) Update record: Never Read record: Never

Registration Details file

The FCP of the Registration Details file will be as follows.

TAG	LENGTH	VALUE	REMARKS
80	02	07D0	File size (2000 bytes, with enough growth space)
82	02	01 01	FDB (Transparent working EF) DCB Write Once, One byte data unit
83	02	AE03	File Identifier
88	01	18	Short EF id
8A	01	01 or 05	LCSI. When file is created first, it will be in 01 state (creation). Later it will be turned into 05 (activated state)
8C	05	6A FF 21 21 FF	Security Attributes. AM Byte: 6A Delete File (Self): Never Terminate EF: (SE#1) Deactivate File: (SE#1) Update Binary: (NEVER)

Field	**Type (Updatable / Non-Updatable)**	**Tag (Key)**	**Sample (Key / Value Pair in JSON format)** Note: (First two bytes will be actual byte length of data written)
Registration Date (in dd-Mon-yyyy format)	Non-updatable	RD1	{"RD":{"RD1":21-Aug-2019, "RD2":21-Aug-2019, "RD3":"N", "RD4":20-Aug-2034, "RD5":"XYZ ABC Dealer", "RD6":"RTOAUTH ABC XYZ"}}
Purchase Date (in dd-Mon-yyyy format)	Non-updatable	RD2	
Registration Type (N, A, O, D)	Non-updatable	RD3	
Registration Validity (in dd-Mon-yyyy format) **(To be stored "As per Fitness" for Transport / Commercial vehicle)**	Non-updatable	RD4	
Dealer Name	Non-updatable	RD5	
Registering Authority Name	Non-updatable	RD6	

Personal Details file

The FCP of the Personal Details file will be as follows.

TAG	LENGTH	VALUE	REMARKS
80	02	09C4	File size (2500 bytes, with enough growth space)
82	02	01 01	FDB (Transparent working EF) DCB Write Once, One byte data unit
83	02	AE04	File Identifier
88	01	20	Short EF id
8A	01	01 or 05	LCSI. When file is created first, it will be in 01 state (creation). Later it will be turned into 05 (activated state)
8C	05	6A FF 21 21 FF	Security Attributes. AM Byte: 6A Delete File (Self): Never Terminate EF: (SE#1) Deactivate File: (SE#1) Update Binary: (NEVER)

Field	**Type (Updatable / Non-Updatable)**	**Tag (Key)**	**Sample (Key / Value Pair in JSON format)** Note: (First two bytes will be actual byte length of data written)
Owner Name	Non-updatable	OD1	{"OD":{"OD1":"SHRI SURESH SHARMA", "OD2":"SHRI RAMESH SHARMA", "OD3":"H.NO.1, LODHI ROAD, DELHI-110003",
Son/Wife /Daughter of (if Individual)	Non-updatable	OD2	
Owner Current	Non-updatable	OD3	

Address			”OD4”:”H.NO.1, LODHI ROAD, DELHI-110003”, “OD5”:1, “OD6”:”INDIVIDUAL”}}
Owner Permanent Address	Non-updatable	OD4	
Owner Serial No.	Non-updatable	OD5	
Ownership Type	Non-updatable	OD6	

Vehicle Details file

The FCP of the **Vehicle Details File** will be as follows.

TAG	LENGTH	VALUE	REMARKS
80	02	0FA0	File size (4000 bytes, with enough growth space)
82	02	01 01	FDB (Transparent working EF) DCB Write Once, One byte data unit
83	02	AE05	File Identifier
88	01	28	Short EF id
8A	01	01 or 05	LCSI. When file is created first, it will be in 01 state (creation). Later it will be turned into 05 (activated state)
8C	05	6A FF 21 21 FF	Security Attributes. AM Byte: 6A Delete File (Self): Never Terminate EF: (SE#1) Deactivate File: (SE#1) Update Binary: (NEVER)

Field	**Type (Updatable / Non-Updatable)**	**Tag (Key)**	**Sample (Key / Value Pair in JSON format)** Note: (First two bytes will be actual byte length of data written)
Vehicle Class	Non-updatable	VD1	{"VD":{“VD1”:”MOTOR CAR”, “VD2”:”MARUTI SUZUKI”, “VD3”:”BALENO”, “VD4”:4, “VD5”:5.5, “VD6”:5, “VD7”:0, “VD8”:0, “VD9”:1000, “VD10”:1200, “VD11”:0, “VD12”: 1234, “VD13”: 1400, “VD14”:0.00, “VD15”:”PETROL”, “VD16”:”ABCD1234” , “VD17”:”1234ABCD”
Maker/Manufacturer	Non-updatable	VD2	
Model	Non-updatable	VD3	
No. of Cylinder	Non-updatable	VD4	
Horse Power (format 99999.99)	Non-updatable	VD5	
Seating Capacity	Non-updatable	VD6	
Standing Capacity	Non-updatable	VD7	
Sleeper Capacity	Non-updatable	VD8	
Unladen Weight (kg)	Non-updatable	VD9	
Laden Weight (kg)	Non-updatable	VD10	
Gross Combination Weight, if applicable (kg)	Non-updatable	VD11	
Wheelbase (mm)	Non-updatable	VD12	
Cubic Capacity (format 99999.99)	Non-updatable	VD13	
Floor Area (sq m) (format 999.999)	Non-updatable	VD14	
Fuel	Non-updatable	VD15	
Chassis No	Non-updatable	VD16	

Engine No	Non-updatable	VD17	, "VD18":"HATCHBACK", "VD19":"BLUE", "VD20": 8, "VD21": 2019, "VD22":1000000, "VD23":"BS-4", "VD24": 1500, "VD25": 3500, "VD26":1600, "VD27":"Y", "VD28":"N", "VD29":"Y"}}
Body Type	Non-updatable	VD18	
Colour	Non-updatable	VD19	
Manufacturing Month (mm)	Non-updatable	VD20	
Manufacturing Year (yyyy)	Non-updatable	VD21	
Sale Amount	Non-updatable	VD22	
Emission Norms	Non-updatable	VD23	
Height (mm)	Non-updatable	VD24	
Length (mm)	Non-updatable	VD25	
Width (mm)	Non-updatable	VD26	
AC Fitted (Y/N)	Non-updatable	VD27	
Video Fitted (Y/N)	Non-updatable	VD28	
Audio Fitted (Y/N)	Non-updatable	VD29	

Endorsement file

The FCP of the endorsement file will be as follows.

TAG	LENGTH	VALUE	REMARKS
80	02	4E20	File size (20000 bytes, with enough growth space)
82	02	01 01	FDB (Transparent working EF) DCB Write Once, One byte data unit
83	02	AE06	File Identifier
8A	01	01 or 05	LCSI. When file is created first, it will be in 01 state (creation). Later it will be turned into 05 (activated state)
88	01	30	SFI – coded in 5 MSBs
8C	05	6A FF 21 21 22	Security Attributes (compact form): Delete File: Never Terminate File: (SE#1) Deactivate File: (SE#1) Update binary: (SE#2)

Field	**Type (Updatable / Non-Updatable)**	**Tag (Key)**	**Sample (Key / Value Pair in JSON format)** Note: (First two bytes will be actual byte length of data written)
Challan No.	Updatable	D1	{"CD1":{"D1":123, "D2":"D", "D3":5, "D4":"SHRI SURESH SHARMA", "D5":"GURGAON", "D6":"21-Aug-2019 21:29", "D7":"SHRI NARESH SHARMA", "D8": 500, "D9":12345}, "CD2":{"D1":123, "D2":"D", "D3":5, "D4":"SHRI SURESH SHARMA", "D5":"GURGAON", "D6":"21-Aug-2019 22:58", "D7":"SHRI NARESH SHARMA", "D8": 500, "D9":12345}}
Accused category (D – Driver, C – Conductor, O – Owner)	Updatable	D2	
Section (s) (code only with delimiter ",", if more than 1)	Updatable	D3	
Challaning Officer Name	Updatable	D4	
Location	Updatable	D5	

Challan Date & Time in dd-Mon-yyyy hh24:mm format	Updatable	D6	
Disposing Officer Name	Updatable	D7	
Penalty	Updatable	D8	
Receipt No.	Updatable	D9	

Axle Details file

The FCP of the **Axle Details File** will be as follows.

TAG	LENGTH	VALUE	REMARKS
80	02	07D0	File size (2000 bytes, with enough growth space)
82	02	01 01	FDB (Transparent working EF) DCB Write Once, One byte data unit
83	02	AE07	File Identifier
88	01	38	Short EF id
8A	01	01 or 05	LCSI. When file is created first, it will be in 01 state (creation). Later it will be turned into 05 (activated state)
8C	05	6A FF 21 21 FF	Security Attributes. AM Byte: 6A Delete File (Self): Never Terminate EF: (SE#1) Deactivate File: (SE#1) Update Binary: (NEVER)

Field	**Type (Updatable / Non-Updatable)**	**Tag (Key)**	**Sample (Key / Value Pair in JSON format)** Note: (First two bytes will be actual byte length of data written)
Number of Axle	Non-updatable	AD1	{"AD":{"AD1":2, "AD2":2, "AD3":"185/65 R15 1 PLY", "AD4": 100, "AD5":2, "AD6":"17*17, 1 PLY", "AD7":100, "AD8":0, "AD9":"NA", "AD10": 0, "AD11":0, "AD12":"NA", "AD13":0, "AD14":123, "AD15":123}}
Number of Tyre – Front Axle	Non-updatable	AD2	
Front Axle (Description and Size of Tyre)	Non-updatable	AD3	
Front Axle Weight (kg)	Non-updatable	AD4	
Number of Tyre – Rear Axle	Non-updatable	AD5	
Rear Axle (Description and Size of Tyre)	Non-updatable	AD6	
Rear Axle Weight (kg)	Non-updatable	AD7	
Number of Tyre – Tandem Axle	Non-updatable	AD8	
Tandem Axle (Description and Size of Tyre)	Non-updatable	AD9	
Tandem Axle Weight (kg)	Non-updatable	AD10	
Number of Tyre – Other Axle	Non-updatable	AD11	
Other Axle (Description and	Non-updatable	AD12	

Size of Tyre)			
Other Axle Weight (kg)	Non-updatable	AD13	
Overhang (mm)	Non-updatable	AD14	
Rearhang (mm)	Non-updatable	AD15	

Vehicle Permit file

The FCP of the **Vehicle Permit File** will be as follows.

TAG	LENGTH	VALUE	REMARKS
80	02	2710	File size (10000 bytes, with enough growth space)
82	02	01 01	FDB (Transparent working EF) DCB Write Once, One byte data unit
83	02	AE08	File Identifier
88	01	40	Short EF id
8A	01	01 or 05	LCSI. When file is created first, it will be in 01 state (creation). Later it will be turned into 05 (activated state)
8C	05	6A FF 21 21 24	Security Attributes. AM Byte: 6A Delete File (Self): Never Terminate EF: (SE#1) Deactivate File: (SE#1) Update Binary: (SE#4)

Field	**Type (Updatable / Non-Updatable)**	**Tag (Key)**	**Sample (Key / Value Pair in JSON format)** Note: (First two bytes will be actual byte length of data written)
Permit Number	Updatable	P1	{"PD":{"PD1":{"P1":1234567, "P2": "NATIONAL PERMIT", "P3":"TRANSPORT ABCD", "P4":22082019, "P5":21082020, "P6":19082019, "P7":"STATE", "P8":"GURGAON", "P9":"MUMBAI", "P10":2, "P11":1500, "P12":1}}, {"PD2":{"P1":1234567, "P2": "SPECIAL PERMIT", "P3":"TRANSPORT ABCD", "P4":22082019, "P5":21082020, "P6":19082019, "P7":"STATE", "P8":"GURGAON", "P9":"MUMBAI", "P10":2, "P11":1500, "P12":1}}}
Permit Type (Description)	Updatable	P2	
Permit IA Name	Updatable	P3	
Validity From (in ddmmyyyy format)	Updatable	P4	
Validity Upto (in ddmmyyyy format)	Updatable	P5	
Replacement Date (in ddmmyyyy format)	Updatable	P6	
Area (e.g. Local, Distt, Region, State etc.)	Updatable	P7	
Route From	Updatable	P8	
Route Upto	Updatable	P9	
Stages	Updatable	P10	
Route Length (km)	Updatable	P11	
Number of Trips per day	Updatable	P12	

Retro Fitting Details file

The FCP of the File will be as follows.

TAG	LENGTH	VALUE	REMARKS
80	02	07D0	File size (2000 bytes, with enough growth space)
82	02	01 01	FDB (Transparent working EF) DCB Write Once, One byte data unit
83	02	AE09	File Identifier
88	01	48	Short EF id
8A	01	01 or 05	LCSI. When file is created first, it will be in 01 state (creation). Later it will be turned into 05 (activated state)
8C	05	6A FF 21 21 21	Security Attributes. AM Byte: 6A Delete File (Self): Never Terminate EF: (SE#1) Deactivate File: (SE#1) Update Binary: (SE#1)

Field	**Type (Updatable / Non-Updatable)**	**Tag (Key)**	**Sample (Key / Value Pair in JSON format)** Note: (First two bytes will be actual byte length of data written)
Kit Manufacturer	Updatable	RF1	{"RF":{"RF1":"ABCDWXYZ", "RF2":"CNG", "RF3":"AAA XXX", "RF4":98765, "RF5":"ONCE PER YEAR FOR BS-4", "RF6":HR34567, "RF7":21082019, "RF8":21082019, "RF9":4567321}}
Kit Type	Updatable	RF2	
Kit Workshop	Updatable	RF3	
Kit Serial Number	Updatable	RF4	
Kit PUCC Norms	Updatable	RF5	
Workshop License No	Updatable	RF6	
Fitment Date (in ddmmyyyy format)	Updatable	RF7	
Hydro Test Date (in ddmmyyyy format)	Updatable	RF8	
Cylinder Serial Number	Updatable	RF9	

Additional Information:-

The FCP of the File will be as follows.

TAG	LENGTH	VALUE	REMARKS
80	02	00C8	File size (200 bytes, with enough growth space)
82	02	01 01	FDB (Transparent working EF) DCB Write Once, One byte data unit
83	02	AE0A	File Identifier
88	01	50	Short EF id

8A	01	01 or 05	LCSI. When file is created first, it will be in 01 state (creation). Later it will be turned into 05 (activated state)
8C	05	6A FF 21 21 FF	Security Attributes. AM Byte: 6A Delete File (Self): Never Terminate EF: (SE#1) Deactivate File: (SE#1) Update Binary: (Never)

Field	**Type (Updatable / Non-Updatable)**	**Tag (Key)**	**Sample (Key / Value Pair in JSON format)** Note: (First two bytes will be actual byte length of data written)
Number of attached Semi-Trailers	Non-updatable	AT1	{"TD":{"AT1":0,"AT2":"NA"}}
Attached Trailer(s) Registration Mark	Non-updatable	AT2	

Details of alternative or additional Semi-Trailer(s) registered with an articulated vehicle:-

The FCP of the alternative or additional Semi-Trailer(s) will be as follows.

TAG	LENGTH	VALUE	REMARKS
80	02	09C4	File size (2500 bytes, with enough growth space)
82	02	01 01	FDB (Transparent working EF) DCB Write Once, One byte data unit
83	02	AE0B	File Identifier
88	01	58	Short EF id
8A	01	01 or 05	LCSI. When file is created first, it will be in 01 state (creation). Later it will be turned into 05 (activated state)
8C	05	6A FF 21 21 FF	Security Attributes. AM Byte: 6A Delete File (Self): Never Terminate EF: (SE#1) Deactivate File: (SE#1) Update Binary: (Never)

Field	Type (Updatable / Non-Updatable)	Tag (Key)	Sample (Key / Value Pair in JSON format) Note: (First two bytes will be actual byte length of data written)
Body Type	Non-updatable	T1	{"ST":{"ST1":{"T1":"NA","T2":123, "T3":456, "T4":"NA", "T5":"NA", "T6":1234, "T7":"NA", "T8":1234, "T9":"NA", "T10":1234, "T11":"NA", "T12":1234}, "ST2":{ "T1":"NA","T2":123, "T3":456, "T4":"NA", "T5":"NA", "T6":1234, "T7":"NA", "T8":1234, "T9":"NA", "T10":1234, "T11":"NA", "T12":1234}}}
Unladen Weight (kg)	Non-updatable	T2	
Laden Weight (kg)	Non-updatable	T3	
Chassis No	Non-updatable	T4	
Front Axle (Number, Description and Size of Tyre)	Non-updatable	T5	
Front Axle Weight (kg)	Non-updatable	T6	
Rear Axle (Number, Description and Size of Tyre)	Non-updatable	T7	
Rear Axle Weight (kg)	Non-updatable	T8	
Tandem Axle (Number, Description and Size of Tyre)	Non-updatable	T9	
Tandem Axle Weight (kg)	Non-updatable	T10	
Other Axle (Number, Description and Size of Tyre)	Non-updatable	T11	
Other Axle Weight (kg)	Non-updatable	T12	

Hypothecation Details

The FCP of the Vehicle Details File will be as follows.

TAG	LENGTH	VALUE	REMARKS
80	02	03E8	File size (1000 bytes, with enough growth space)
82	02	01 01	FDB (Transparent working EF) DCB Write Once, One byte data unit
83	02	AE0D	File Identifier
88	01	68	Short EF id
8A	01	01 or 05	LCSI. When file is created first, it will be in 01 state (creation). Later it will be turned into 05 (activated state)
8C	05	6A FF 21 21 FF	Security Attributes. AM Byte: 6A Delete File (Self): Never Terminate EF: (SE#1) Deactivate File: (SE#1) Update Binary: (Never)

Field	Type (Updatable / Non-Updatable)	Tag (Key)	Sample (Key / Value Pair in JSON format) Note: (First two bytes will be actual byte length of data written)
Name of Financier	Non-updatable	H1	{"HD":{"HD1":{"H1":"STATE BANK OF INDIA"}, "HD2":{"H1":"NA"}}}

Signature Details

The FCP of the Vehicle Details File will be as follows.

TAG	LENGTH	VALUE	REMARKS
80	02	3000	File size (12288 bytes, with enough growth space)
82	02	01 01	FDB (Transparent working EF) DCB Write Once, One byte data unit
83	02	AE0E	File Identifier
88	01	70	Short EF id
8A	01	01 or 05	LCSI. When file is created first, it will be in 01 state (creation). Later it will be turned into 05 (activated state)
8C	05	6A FF 21 21 21	Security Attributes. AM Byte: 6A Delete File (Self): Never Terminate EF: (SE#1) Deactivate File: (SE#1) Update Binary: (SE#1)

Total Size of card: - 64 KB.

Data size: - 58628 bytes.

FCP size: - 425 bytes.

Total size used: - 59053 bytes
(With enough growth space**)**