



बीमा विनियामक और विकास प्राधिकरण
INSURANCE REGULATORY AND
DEVELOPMENT AUTHORITY

Ref: IRDA/NL/MTP/2014-15/EXDRF

11th February 2014

Exposure Draft on Revision in Premium Rates for Motor Third Party Insurance Covers for the Financial Year 2014-15.

As per the Authority's order no. IRDA/NL/NTFN/MOTP/066/04/2011 dated 15th April 2011, the Authority would review and adjust the premium rates for motor third party insurance covers annually based on the formula as given hereunder:

$$P(t) = C1(t) * CII(t-1) + C2(t)$$

Where,

P(t) is the motor TP premium applicable to the financial year 't',

CII(t-1) is the Cost Inflation Index for the year 't-1' as notified by CBDT, and

C1(t) and C2(t) are the parameters applicable to the financial year 't' whose values shall be determined and notified by the Authority in each financial year based on the experience measured in terms of average claim amounts, frequency and expenses involved in servicing the motor TP business. The values of the parameters C1(t) and C2(t) may vary according to the class of vehicle.

Accordingly, the Authority had reviewed and adjusted the premium rates for the FY 2012-13 vide its order no. IRDA/NL/NTFN/MOTP/076/03/2012 dated 27th March 2012 and for the FY 2013-14 vide its order no. IRDA/NL/NTFN/MOTP/061/03/2013 dated 26th March 2013.

In view of the above, the Authority hereby issues this exposure draft on revision of premium rates for motor third party insurance for the FY 2014-15 and invites comments on the proposed rates from all the stakeholders concerned.

A. The Factual Data:

The Authority has made use of the data available with the Insurance Information Bureau (IIB) for the experience period of the Underwriting Years (i.e. Policy Years) from 2007-08 to 2012-13 in respect of no. of policies, no. of claims reported and amount of claims paid up to 31st March 2013. The data is given in Annexure I.

B. The working of the Rate Revision:

Data Used

1. The paid claims data in respect of each of the underwriting years starting from the year 2007-08 to 2012-13 is given by the Insurance Information Bureau (IIB) of India.
2. The paid claims data for a particular u/w year is in the form of that paid in that u/w year, paid in the next u/w year and so on till year 2012-13.
3. The paid claims are tabulated according to the nature of claim, for example, Injury, Death, Third Party Property Damage (TPPD), and Others. The IIB has informed that any claim that does not pertain to any of the standard types of claims, has been treated as "Others".
4. For each type of the claim as mentioned above, the claim amount is further divided according to the type of payment, for example, Claim amount, Interest Amount and Expenses Amount.
5. All the claim records as mentioned above are provided by the IIB for each of the vehicle category as per the classification maintained by it.

Basic Methodology

1. The pure claim costs for each underwriting year (u/w year) are estimated using Chain Ladder Method (i.e. Development Technique) applied on Cumulative Paid Claims Data
2. The main characteristic of the technique is that ultimate claims for each u/w year are estimated from the recorded values to date, assuming that the future development of claims is similar to the claims' development of prior years
3. Thus the basic assumption of the technique is that the past is indicative of the future and that the future development of claims is similar to that experienced in the past.
4. The selection of age-to-age-factors (ATAFs) is done after considering the various averages of ATAFs, like simple average, geometric average, volume-weighted average, medial average (excluding one high and one low value)
5. Selection of Tail Factor:
 - It is observed that the ATAFs for the most mature development periods available are significantly greater than 1.00. However, this is not surprising considering the fact that the motor third party insurance is a long-tail line of business

- The effect of the above is to select a tail factor which will project the claims from the latest development period to the ultimate
 - In selecting the tail factor, consideration is given to IIB's motor third party claim development analysis report.
 - The selected tail factor depends on the type of vehicle. In majority of the cases, the tail factor is assumed at 1.20 and 1.25
6. With the use of cumulative development factor (age-to-ultimate), and the latest cumulative paid claim amount for each policy year, the ultimate claim amount is then estimated for each policy year.
 7. Trending: The ultimate claims for each u/w year are then trended for changes in claim frequencies, claim severities etc to the level of policy year 2014-15.
The projected ultimate claims are needed to adjust for underlying trends expected to occur between the experience period and the projected period. The main factors to consider are: changes in economic inflation & other economic conditions, changes in social environment, changes in court awards etc.
 8. The trended claim costs are then adjusted for management expenses to arrive at the trended ultimate premium payable for each policy year
 9. The premium for policy year 2014-15 is then selected by taking average of the premium for some/all the available policy years.
 10. The development technique is used for each vehicle category and is applied on each of the combinations of nature of claims and nature of payment.

Assumptions

- The management expenses are taken at 15 % of premium (i.e. variable expenses)
 - The loss trend is taken at 10 % pa for all the classes of vehicles
 - The fixed expenses for private cars & two wheelers are taken at Rs. 25 per policy, whereas for commercial vehicles category of classes 'A' & 'C' (except C4), the same has been taken at Rs. 50 per policy. The rest of the classes may be assumed to have FE of Rs. 25 per policy.
 - The investment income has not been considered in the calculations
 - Each category of vehicle has certain sub-categories. The IIB has treated the policy records as "Others" where there is no clear sub-category code. The "Others" sub-category has not been considered for the calculations for classes other than Commercial Vehicles where the proportion of this sub-category is low as compared to other sub-categories
 - The business mix of subclasses within a vehicle class does not change substantially over the next year
- 1

The Premiums

The values of the parameters C1 (t) and C2 (t) and thus the premium proposed for the financial year 2014-15, i.e. for the period from 01st April 2014 to 31st March 2015 are given in Annexure II. The parameter C1 (t) incorporates the frequency, severity and the variable expenses for the subclass; whereas the parameter C2 (t) incorporates the fixed expenses.

For commercial vehicles where the sub-category "others" is a major proportion of the overall, it is included in the workings.

The data is not available for two classes: Class F (ii), and Class B: Trailers. As there was no data available for class F (ii), the Authority has assumed the same % increase for class F (ii) as that for the class F (i). In case of trailers (Class B), the Authority is of the view that the premiums for this class be increased by the increase in Cost Inflation Index over the previous year, i.e. 10.21 %.

The average claim size of death claims (TP Act only policies) as on 31st March 2013:

Policies issued in	Amount (Rs.)	Percentage Change
2007-08	209502	-
2008-09	198166	-5.41 %
2009-10	230380	16.26 %
2010-11	252210	9.48 %
2011-12	304021	20.54 %
2012-13	386713	27.20 %
Note: Amount includes paid and Outstanding		

It is observed that there is a high increase in average death claim size over the years, and the trend suggests that it will be at these levels or more in the coming years as well, when the claims pertaining to the policies issued in the year 2014-15 will be settled/paid.

In view of the above, all stakeholders are invited to provide their comments on this draft proposal so as to reach the Authority, also by e-mail addressed to suresh@irda.gov.in, on or before 28th February 2014.


(M Ramaprasad)
Member (Non-Life)

Annexure I: Data (UYs 2011-12 and 2012-13)

Class Code	CC Code	2011-12						2012-13					
		No of Policies	Premium (Rs. crs)	No of TP Claims	Claims Paid till 31/03/2013 (Rs. Crs)	Claims Outstanding as on 31/03/2013 (Rs. Crs)	Claims Reported as on 31/03/2013 (Rs. Crs)	No of Policies	Premium (Rs. crs)	No of TP Claims	Claims Paid till 31/03/2013 (Rs. Crs)	Claims Outstanding as on 31/03/2013 (Rs. Crs)	Claims Reported as on 31/03/2013 (Rs. Crs)
11	50	4500560	428.38	5800	42.44	164.84	207.28	5967536	614.01	697	6.56	50.00	56.55
11	51	5705248	583.84	8786	73.28	243.59	316.87	7085381	789.55	1364	11.83	96.95	108.78
11	52	2556021	714.06	6576	58.60	235.81	294.40	2975500	875.91	915	9.81	105.44	115.25
11	99	157243	103.65	84	0.16	3.67	3.82	42538	5.26	1	0.00	1.34	1.34
		12919072	1829.92	21246	174.47	647.91	822.38	16070955	2284.73	2977	28.19	253.72	281.91
14	46	1938627	70.04	733	2.82	19.44	22.25	1809296	69.44	75	1.47	4.95	6.42
14	47	27243892	996.14	12782	68.00	257.18	325.18	30752080	1206.48	1684	16.99	115.24	132.23
14	48	3012300	110.63	2373	14.01	54.12	68.14	3360547	132.73	339	2.92	22.38	25.30
14	49	84838	3.79	35	0.20	0.72	0.92	95123	4.79	5	0.06	0.50	0.56
14	99	10886	1.36	1	0.00	0.02	0.02	793322	3.27	0	0.00	0.01	0.01
		32290543	1181.97	15924	85.03	331.48	416.52	36096368	1416.71	2103	21.44	143.08	164.52
17	58	1386421	1123.43	6542	40.52	254.72	295.24	0	0.00	759	6.38	74.25	80.63
17	59	277551	247.74	1950	16.67	103.43	120.10	0	0.00	305	3.32	39.92	43.24
17	60	690424	640.33	6249	62.78	304.70	367.48	0	0.00	894	13.69	104.59	118.28
17	61	681863	617.60	6651	54.27	354.16	408.43	0	0.00	763	9.40	90.58	99.98
17	62	66266	64.12	613	4.09	35.22	39.31	0	0.00	53	0.55	8.93	9.48
17	99	1451859	916.68	10299	73.61	411.76	485.37	5460152	5446.30	586	5.89	44.53	50.42
		4554384	3609.89	32304	251.94	1463.98	1715.92	5460152	5446.30	3360	39.24	362.80	402.03
18	58	54035	41.44	158	1.76	4.52	6.28	0	0.00	37	0.70	2.70	3.40
18	59	8568	6.88	65	0.53	2.14	2.67	0	0.00	10	0.19	1.78	1.98
18	60	12544	10.26	56	0.80	2.72	3.52	0	0.00	14	0.02	2.06	2.07
18	61	10433	8.62	41	0.51	1.47	1.98	0	0.00	10	0.05	1.07	1.12
18	62	1295	2.03	11	0.16	0.41	0.57	0	0.00	2	0.03	0.16	0.19
18	99	304382	232.64	785	7.40	16.29	23.69	161620	154.87	30	0.21	1.50	1.71
		391257	301.86	1116	11.16	27.55	38.71	161620	154.87	103.	1.20	9.27	10.47

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14

Annexure I: Data (UYs 2009-10 & 2010-11)

Class Code	CC Code	2009-10				2010-11					
		No of Policies	Premium (Rs. crs)	No of TP Claims	Claims Paid till 31/03/2013 (Rs. Crs)	Claims Outstanding as on 31/03/2013 (Rs. Crs)	No of Policies	Premium (Rs. crs)	No of TP Claims	Claims Paid till 31/03/2013 (Rs. Crs)	Claims Outstanding as on 31/03/2013 (Rs. Crs)
11	50	2412811	199.50	20825	214.01	142.71	356.72	3853021	330.62	13001	109.62
11	51	3782332	371.75	18760	192.58	160.75	353.33	4949732	472.53	16071	162.00
11	52	1601831	416.76	18630	216.39	205.65	422.04	2229542	570.75	13617	142.02
11	99	1755873	218.83	7140	62.68	20.16	82.84	253425	111.53	2115	10.82
		9552847	1206.84	65355	685.67	529.27	1214.94	11285220	1485.43	44804	424.46
											690.57
											1115.03
14	46	1412622	47.08	3773	24.46	14.71	39.17	1766644	58.86	1737	8.63
14	47	17417359	589.83	35529	248.14	222.42	470.56	23289201	788.76	26151	168.98
14	48	1948136	66.21	4297	35.79	31.41	67.20	2530831	85.87	3751	25.17
14	49	72792	2.68	73	0.55	0.53	1.08	69917	2.73	57	0.30
14	99	4255328	143.48	248	0.67	0.04	0.71	12606	0.23	92	0.14
		25106237	849.27	43920	309.60	269.12	578.72	27669199	936.45	31788	203.21
											350.64
											553.85
17	58	661337	322.00	23900	230.07	254.20	484.28	1135159	559.09	13934	110.81
17	59	292836	147.28	7428	86.65	84.38	171.03	230222	127.66	5052	50.00
17	60	517779	290.91	21508	303.68	318.01	621.69	6466693	374.00	14672	167.11
17	61	328830	185.49	20540	283.75	300.76	584.51	564496	323.82	16450	184.28
17	62	23136	14.49	2368	33.60	22.27	55.87	45128	28.13	1488	19.72
17	99	1766081	823.39	30429	351.46	345.55	697.01	1250924	506.57	22016	217.23
		3589999	1783.57	106173	1289.21	1325.17	2614.38	3872622	1919.28	73612	749.15
											1703.87
											2453.03
18	58	37345	17.41	959	10.85	12.18	23.03	45511	21.75	281	2.99
18	59	10680	4.85	199	2.62	1.51	4.12	7300	3.75	63	0.58
18	60	12002	5.84	379	3.40	6.21	9.60	11016	5.76	155	2.92
18	61	5273	2.59	335	2.98	4.53	7.50	6902	3.57	151	1.59
18	62	482	0.25	200	2.95	0.61	3.56	960	0.56	16	0.09
18	99	202108	92.96	3188	40.31	14.12	54.44	248035	111.90	2329	27.01
		267890	123.89	5260	63.10	39.16	102.26	319724	147.29	2995	35.19
											33.20
											68.39

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		Annexure I: Data (UY's 2007-08 and 2008-09)		
		2007-08		2008-09
Class Code	CC Code	No of TP Claims Paid during 2012-13	Claims Paid during 2012-13 (Rs. Crs)	Claims Paid during 2012-13 (Rs. Crs)
11	50	3396	46.64	3774
11	51	1818	28.92	3259
11	52	2165	38.39	3710
11	99	71	1.14	18
		7450	115.08	10761
				173.40
14	46	1326	13.27	523
14	47	4007	43.90	6485
14	48	316	3.55	616
14	49	10	0.25	22
14	99	16	0.04	1
		5675	61.01	7647
				84.02
17	58	5356	73.05	6908
17	59	623	10.84	1277
17	60	2423	59.59	4662
17	61	1687	43.09	4080
17	62	115	3.35	312
17	99	6821	127.51	7139
		17025	317.43	24378
				438.35
18	58	107	1.48	782
18	59	4	0.16	26
18	60	25	0.24	95
18	61	18	0.13	65
18	62	1	-0.06	6
18	99	141	2.40	220
		296	4.35	1194
				14.47

Note: The data for the underwriting years 2007-08 & 2008-09 is incremental in nature, i.e. No. And amount of claims paid in the financial year 2012-13. The data for these two years as on 31st March 2012 was published in last year's exposure draft dated 16th February 2013 on motor third party premium rates

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19	58	1119	14.67		790		8.70	
19	59	38	0.25		43		1.28	
19	60	45	1.14		65		1.47	
19	61	143	4.41		179		5.15	
19	62	2	0.09		10		0.33	
19	99	772	9.65		798		10.56	
		2119	30.21		1885		27.48	
20	58	34	0.59		28		0.13	
20	59	0	0.00		0		0.00	
20	60	4	0.00		19		0.31	
20	61	1	0.00		4		0.17	
20	62	0	0.00		0		0.00	
20	99	50	0.52		36		0.52	
		89	1.12		87		1.13	
21	54	3279	33.60		4226		42.99	
21	55	337	4.11		1065		11.76	
21	56	594	9.06		1378		19.08	
21	57	35	0.78		40		1.79	
21	99	400	7.78		491		7.55	
		4645	55.34		7200		83.16	
22	63	820	7.73		1270		11.55	
22	64	6	0.01		15		0.08	
22	99	1674	21.11		2096		29.67	
		2500	28.84		3381		41.30	
23	99	2246	34.55		3502		57.61	
24	99	3	0.16		3		0.04	
25	99	69	1.20		33		0.49	
26	99	29	0.36		32		0.56	
TOTAL		42146.00	649.66		60103.00		922.01	

Annexure II: The Estimated Premium for the FY 2014-15

Cost Inflation Index (2013-14)	939	Premium wef 01st April 2013	C1 (t)	C2 (t)	Premium wef 01st April 2014	% Increase over previous year
Private Cars						
Not exceeding 1000 cc	941	2.340		29	2227	136.62%
Exceeding 1000 cc but not exceeding 1500 cc	1110	1.744		29	1667	50.20%
Exceeding 1500 cc	3424	4.542		29	4295	25.42%
Two Wheelers						
Not exceeding 75 cc	414	0.608		29	600	44.94%
Exceeding 75 cc but not exceeding 150 cc	422	0.477		29	477	13.15%
Exceeding 150 cc but not exceeding 350 cc	420	0.420		29	424	0.96%
Exceeding 350 cc	804	0.294		29	306	-61.97%
Goods Carrying Vehicles Public Carriers (other than 3 wheelers)						
GVW not exceeding 7500 kgs	13082	13.831		59	13046	-0.28%
Exceeding 7500 kgs but not exceeding 12000 kgs	13968	12.740		59	12022	-13.93%
Exceeding 12000 kgs but not exceeding 20000 kgs	14873	18.692		59	17611	18.41%
Exceeding 20000 kgs but not exceeding 40000 kgs	14974	24.512		59	23075	54.10%
Exceeding 40000 kgs	15035	33.741		59	31742	111.12%
Goods Carrying Vehicles Private Carriers (other than 3 wheelers)						
GVW not exceeding 7500 kgs	9690	7.224		59	6842	-29.39%
Exceeding 7500 kgs but not exceeding 12000 kgs	11197	7.650		59	7242	-35.32%
Exceeding 12000 kgs but not exceeding 20000 kgs	9969	8.285		59	7838	-21.37%
Exceeding 20000 kgs but not exceeding 40000 kgs	111470	11.175		59	10552	-8.01%
Exceeding 40000 kgs	12851	28.295		59	26628	107.21%

	Premium wef 01st April 2013	C1 (t)	C2 (t)	Premium wef 01st April 2014	% Increase over previous year
Goods Carrying Motorized Three Wheelers and Motorized Pedal Cycles – Public Carriers	4098	5.084	59	4833	17.94%
Goods Carrying Motorized Three Wheelers and Motorized Pedal Cycles – Private Carriers	3218	4.634	59	4410	37.03%
Trailers					
Agricultural Tractors upto 6 HP	418	0.459	29	461	10.21%
Other vehicles including Miscellaneous & Special Type of Vehicles (Class-C), (For each trailer, for more please multiply by no. of trailers)	1023	1.169	29	1127	10.21%

	Premium wef 01st April 2013	C1 (t)	C2 (t)	Premium wef 01st April 2014	Premium wef 01st April 2014	% Increase in Premium
Four wheeled vehicles used for carrying passengers for hire or reward with carrying capacity not exceeding 6 passengers	Premium (per licensed passenger) Basic TP Premium (A)			Premium (per licensed passenger) Basic TP Premium (A)	Premium (per licensed passenger) Basic TP Premium (A)	Premium (per licensed passenger) Basic TP Premium (A)
Not exceeding 1000 cc	3417	657	8.819	59	8340	1604
Exceeding 1000 cc but not exceeding 1500 cc	5338	657	6.957	59	6591	811
Exceeding 1500 cc	6191	657	12.787	59	12065	1280
{TP Premium is the total of a basic Amount (A) plus an amount derived by multiplying the Licensed carrying capacity by the amount in (B)}						

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	Premium wef 01st April 2013	C1 (t)	C2 (t)	Premium wef 01st April 2014	Premium (per licensed passenger)	Basic TP Premium (A)	Premium (per licensed passenger)	Basic TP Premium (A)	Premium (per licensed passenger)	% Increase in Premium
Three wheeled vehicles used for carrying passengers for hire or reward with carrying capacity not exceeding 6 passengers <small>{TP Premium is the total of a basic Amount (A) plus an amount derived by multiplying the Licensed carrying capacity by the amount in (B)}</small>	1102	527	1.423	59	1395		667	26.58%	26.58%	
Four or more wheeled vehicles used for carrying passengers with carrying capacity exceeding 6 passengers for hire or reward <small>{TP Premium is the total of a basic Amount (A) plus an amount derived by multiplying the Licensed carrying capacity by the amount in (B)}</small>	7843	479	8.087	59	7653		467	-2.43%	-2.43%	
Three wheeled passenger vehicles used for carrying passengers for hire or reward with carrying capacity exceeding 17 passengers <small>{TP Premium is the total of a basic Amount (A) plus an amount derived by multiplying the Licensed carrying capacity by the amount in (B)}</small>	7843	479	8.087	59	7653		467	-2.43%	-2.43%	
Motorized three wheeled passenger vehicles used for carrying passengers for hire or reward with carrying capacity exceeding 6 passengers but not exceeding 17 passengers <small>{TP Premium is the total of a basic Amount (A) plus an amount derived by multiplying the Licensed carrying capacity by the amount in (B)}</small>	2641	527	3.498	58.824	3343		667	26.58%	26.58%	

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	Premium wef 01st April 2013	C1 (t)	C2 (t)	Premium wef 01st April 2014	% Increase
Motorized Two wheelers used for carrying passengers for hire or reward					
Not exceeding 75 cc	780	0.595	29	588	-24.59%
Exceeding 75 cc but not exceeding 150 cc	780	0.595	29	588	-24.59%
Exceeding 150 cc but not exceeding 350 cc	780	0.595	29	588	-24.59%
Exceeding 350 cc	1794	1.409	29	1353	-24.59%
Special Types of Vehicles					
i) Pedestrian controlled Agricultural Tractors with Horse Power rating not exceeding 6HP , Hearses and Plane Loaders	570	1.5723	29	1506	164.18%
ii) Other Misc & Spl types of vehicles	1750	4.8921	29	4623	164.18%
Motor Trade (Road Transit Risks)					
i) Distance not exceeding 2400 kms	1088	1.1097	29	1071	-1.53%
ii) Distance exceeding 2400 kms	1308	1.3404	29	1288	-1.53%
Motor Trade (Road Risks) (Excluding Motorized Two Wheelers) – (Named Driver or Trade Certificate)					
1st named driver or certificate	1216	0.3782	29	385	-68.38%
For additional drivers/ certificates up to 5 (per driver/certificate)	588	0.1667	29	186	-68.38%
For additional Drivers/ Certificates exceeding 5 but not exceeding 10 (per driver/ certificate)	379	0.0963	29	120	-68.38%
For additional Drivers/ Certificates exceeding 10 but not exceeding 15 (per driver/ certificate)	328	0.0791	29	104	-68.38%
Motor Trade (Road Risks) (Motorized Two Wheelers) – (Named Driver or Trade Certificate)					
1st named driver or certificate	654	0.1889	29	207	-68.38%
For each additional Driver/ Certificate	326	0.0785	29	103	-68.38%

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