



**6<sup>th</sup> IRF Regional Conference**  
**Road Safety Strategy in India – Action Plan**  
**3-5 October 2011 at Pragati Maidan, New Delhi**

**Transcript of Panel Discussion held on 5<sup>th</sup> October 2011**



**Comperre:** I like to invite on stage, our Chairman of this Concluding Session, Mr. K. K. Kapila, Chairman, IRF and Co-Chairman Mr. C. Kandasamy, Additional Director General, Ministry of Road Transport & Highways. Please give them a big round of applause ladies and gentleman. I would like to invite our esteemed panelists for this session Mr. Rohit Modi, Mr. P. T. Mukund, Mr. R. P. Indoria, Mr. V. L. Patankar, Mr. S. K. Puri, Mr. N. K. Sinha and Mr. Brook M. Jerzyk. Ladies and Gentleman, the theme for the panel discussion is *Strategic Action Plan for Road Safety – Decade of Action*.

Mr. Kapila, as you all may be aware, is Chairman of the International Road Federation, Geneva Programme Centre. He is the first non-European to be unanimously elected to this position. He is a fellow of the New York Academy of Sciences and Chairman and Managing Director of Intercontinental Consultants and Technocrats (ICT) Pvt Ltd. Mr. Kapila has been conferred upon many prestigious awards over the years, which include the World Lifetime Achievement Award, Star CEO Award of the Year and recently the Pride of India Award on the occasion of Pravasi Divas in January 2011 and Meri Dilli Award 2010 in February this year. Mr. Kapila is well known for his passion and perseverance and pursuing and promoting road safety. Our Co-chair for this panel discussion, Mr. C. Kandasamy is Additional Directory General of the Ministry of Road Transport & Highways. Mr. Kandasamy belongs to the 1975 batch of the Indian Engineering Services (Roads Cadre) and has been with the Govt. of India in the Ministry of Road Transport & Highways for over three decades. During this period, he also served NHAI as General Manager, Chief General Manager and Member Technical. Presently, he is also heading the Sectoral Innovation Committee for Road Transport & Highways sector. With these words, I would like to request Mr. Kapila to kindly chair this Panel Discussion.

**Mr. Kapila:** Good evening ladies and gentlemen. We have now reached the last part of the Conference. We chose this topic to be able to come to a conclusion as to what actions we should take as a nation to achieve the objective of the Decade of Action, which is to reduce the road accidents and road fatalities by 50% in the coming decade, launched worldwide on 11<sup>th</sup> of May 2011 which will end in December 2020. We have already lost good six months of the Decade of Action without an action plan in place. So there is an urgent need to come out with a broad based pragmatic action plan and request the government to adopt it to enable the nation to achieve the planned objective. First, I briefly recapitulate the salient points of recommendation which have come up during the deliberations. We will then move on to the panel for any additional points under each of the pillars and thereafter, I will request the house to add any further points to finalize it. Our Chief Guest of the Inaugural Session, Mr. B. K. Chaturvedi, in his address, brought out four points for attention of the Conference, namely legislation, technology, education - both school curriculum and also public education on road safety, and infrastructure. All measures to be taken to upgrade the infrastructure including making them forgiving and it is to be taken up on priority; and similarly to upgrade the technology required to make the roads safe. He mentioned about ITS and other technologies for managing traffic on roads.

Now, the first session was on the pillar 'Building Road Safety Management Capacity', at it made four key recommendations, which are: (i) Government initiative to set up the Road Safety Boards at national and state levels is to be speeded up. (ii) Sustained funding arrangement is to be made for road safety by contributions from both government as well as private sectors. (iii) Technical capacity of road authorities across the country is to be enhanced to effectively deal with planning, design and implementation of road projects with specific objectives of road safety, and (iv) All highway and traffic engineers are to be trained to develop safety consciousness and should be equipped to tackle various road safety problems. Consequently, the requisite number of training institutes also needs to be set up promptly.

The second pillar is on 'upgrading the safety in road infrastructure'. Here again, there are four recommendations. (i) Mandatory checks and audit in the form of road safety audit should be enforced at all stages of planning, design and implementation of road projects. The compliance to the recommendations of Road Safety Audit must be made mandatory, (ii) All designs must be for forgiving roads and should take cognisance of best knowhow and research results available from around the world, (iii) There must be accountability for the road authorities/agencies involved in the design of the road and they must be responsible for the risk left unattended in the design, and (iv) Many times, planning and design are deficient due to very short time allotted for these works. A well planned and designed road, constructed after evaluation of various alternatives, turns out to be more economical and with shorter implementation time. So, adequate time needs to be given for planning and design.

The recommendations in respect of the third pillar, relating to 'enhancement of safety in vehicles', are: (i) All vehicles must be uniformly equipped with necessary in-vehicle safety devices regardless of their class and target market, (ii) The inspection and maintenance regime should be established along with fully equipped testing centres and all the provisions of M. V. Act must be enforced strictly, and (iii) Non-motorized Vehicles Act (NVA) is required to be promulgated for controlling the fitness or road worthiness of these vehicles along with their usability in urban and non-urban roads.

Against the fourth pillar, which concerns the 'improvement of road user behaviour', the recommendations are: (i) Adoption of technology assisted gadgetry like speed camera, red light camera, etc. for indiscriminate enforcement to curb violations and to change road user behaviour, (ii) Vigorous awareness campaign about the

technology assisted enforcement in all forms of media, (iii) Structured school curriculum should be adopted uniformly across the country to inculcate road safety culture in the children who are the future citizens, (iv) Intensive public education and awareness campaign should be carried out on continual basis, especially for speed limits, alcohol, helmet, seat belt and child restraint. These are social (marketing-like) campaigns, which need to be done; and (v) Adoption of automated technology based traffic management to make the enforcement of traffic rules very strict and without discrimination, which could change the road user behaviour.

The fifth pillar relates to the 'emergency services for improving road safety'. The recommendations under this pillar are: (i) To create awareness about the Supreme Court guidelines that a hospital cannot refuse to treat an accident victim and the police will not question the person who brings the accident victim to the hospital, (ii) Emergency vehicles must have preferential right of way on the road by strict enforcement with exclusive access to hospitals and trauma centres. In special cases, air lifting may also be resorted to. (iii) An extensive network of trauma centres and hospitals with facility of trauma care must be established primarily along the entire 70,000 km of NH network. This would also have to be spread by and large along the entire state road networks as well. Comprehensive road layouts are therefore required to be drawn so that accident victims from various places have easy and fast access to the trauma centres. (iv) Medical colleges should run special courses for delivering the emergency care services. The interested public volunteers could be trained in first aid to help accident victims in case of need. I would like to add one more recommendation here, which is that as per the Motor Vehicle Act, all drivers of heavy motor vehicles have to be trained in first aid trauma care. This needs to be enforced strictly and if we can do that many lives can be saved, because close to an accident site a heavy motor vehicle is bound to pass without any delay. It will bring in sensitivity in their efforts as well as assist the accident victims promptly. These are the recommendations which have been drawn.

Now I would request our Panelists one by one to suggest additional recommendations. They should identify the pillar under which they would like to add it and then come out with the specific recommendations. May I request Mr. Modi to start.

**Mr. Modi:** Mr. Kapila, at the outset, I must actually pay compliments to you. I remember, Mr. A. P. Bahadur was one person who would keep talking about the road safety from inside the government, and after him, I have seen you really

holding the flag high - actually driving the agenda of road safety, non-stop. Every time I met you personally or professionally, your agenda was road safety. I think we should all give a big hand to Mr. Kapila, as he has really done a fantastic job on this. Having said that, I think today where India is lacking very strongly is accountability. When an accident happens, it makes no difference to anybody except the person who has died and his or her family. In my organisation, for example, we have two important policies. We have a motto, which is zero tolerance in safety. More importantly, for every one person's death, two people have to lose their jobs. Now it's not always easy. In fact, in some cases, we even had three people losing their jobs. In one case, nobody's services were terminated because that person was driving the vehicle himself. He drove off the hill, so there was nobody who could be blamed for it. But we have been following this policy strictly and I have actually removed three Project Managers in the last one year. They were outstanding Project Managers, some of whom I loved and appreciated. Now we are laying a policy for entire site. If there is an accident, no staff member at the entire site will get promotion and even increment next year. It is a very tough decision, especially in these days of high attrition. But, we want to send a message for the organization that a fatal accident is unacceptable and somebody will have to pay the price.

I think as a Nation, we are not bothered. I was reading the two background papers on Africa and Southern Australia. They said that for a target of 50% reduction in fatalities, at least 40% reduction should be achieved, even though traffic was increasing. When it became only 34%, they thought they were way below the mark. In our case, there is no target set yet. Therefore, there is no question of accountability and our entire action plan suffers. There is no measurable indicator and thus no measurable performance. So target setting is very important: (i) zero tolerance, and (ii) achieve safety. I don't know how a linkage can be established. I can think of a linkage for a private sector. If there is a fatal accident on road, the concessionaire shall deposit one day's toll collection, either for the project if it is too large, or for the toll plaza at least, in the vicinity of which the accident happened, into a national safety fund. They should be made to feel responsible. I know that it is radical, I know my own brothers outside will oppose it. However, as Rohit Modi and as an individual, I will actually support it and I am prepared to campaign for it. We must do that.

The second thing which you mentioned is mandatory safety audits. Today these are not being carried out. We don't do safety audit either of design or of construction or of operations. We should not only have an annual safety audit, but more important

the compliance with that audit recommendations subsequently too. Today, the audits are carried out in a few cases, and if carried out, the audit reports remain on the shelf and never acted upon. Finally, I think, we must do the following three things: (i) across the nation, for every ministry and government department, we should have a motto of zero tolerance in safety, (ii) target setting, and (iii) accountability and responsibility. It may be a little difficult for government roads, but we will have to figure out a way between traffic police and highway authorities.

**Mr. Kapila:** Thank you, thank you very much. Excellent suggestions. May I request Mr. Mukund to give his ideas.

**Mr. Mukund:** Congratulations to you Mr. Kapila on hosting such a successful conference. I have looked at it slightly differently from a process perspective and what I have essentially tried to do is capture the voices from the sessions that have happened over the last couple of days. At a very strategic level, the Decade of Action Plan for road safety in India, in my opinion, will have three parts. The first part is the understanding of the problem. The second part is the road map to solving the problem, and the third is the results and solutions that come out of implementation of this road map. The understanding of the problem part does not seem to be the issue on hand, because a lot of information presented here over the last two days seems to have been repeated over the last many years. For instance, we know that one accident per minute is happening in India, we know one death is happening every four minutes. As per our internal estimates, we are going to have 1,45,000 deaths, 5,50,000 accidents, 5,50,000 people getting injured, loss of productivity, collateral damage and legal expenses, all tantamounting to maybe about, like Mr. Kapila mentioned yesterday as Rs. 100,000 crore; that's about 2.2 percent of our GDP, that was talked about.

We know that the road network in India is overburdened as it is used by 65% of our freight traffic and 85% of the passenger traffic. We also know that five States, namely Tamil Nadu, Andhra Pradesh, Maharashtra, Madhya Pradesh and Karnataka contribute 50% of the accidents. Further, 23 cities account for 70% of the deaths on road. The severity of the accidents is much higher in smaller towns compared to cities, e.g. Varanasi and Kanpur have much higher fatalities. National Highways and State Highways account for almost 2/3<sup>rd</sup>s of the deaths. Motorized vehicles cause almost 92% of the total accidents. From an occupant fatality perspective, 40% is from two-wheelers, cars and jeeps. Whereas time-wise, 60% of the accidents happen during 6 AM to 6 PM and the balance 40% during 6 PM to 6 AM. More than

70% of the accidents take place due to driver's fault and out of that 50% because of over speeding, 10% from drunken driving and drugs and so forth. So, per se understanding the problem is probably not the issue. We understand the problem very well. One area that we may focus on is revalidation of data. We could know about some of the good steps taken by IRF, IRC, NHAI, Delhi Police and a few other states like Kerala, from the presentations made by Mr. Kapila and others. Mr. Patankar mentioned in his presentation that they were doing some extensive work in this area. But, is the correlation between the actions taken and the reduction in fatalities available. We should have the correlation data to prove that a lot of the actions actually resulted in reduction of fatalities. We probably have to focus on this approach. Mr. Garg, AIIMS, GVK and a lot of some other people presented some good information, but, at least from an industry perspective, I got a feeling that it was people dependent and not process dependent. My recommendation, therefore, is to focus on the road map to problem solving, because the problem is relatively already well understood. The road map to problem solving is no different from the strategic framework that has been laid out by the United Nations General Assembly, i.e. the five pillars: road safety management, safer roads and mobility, safer vehicles, safer road users and post crash response. What I would essentially like to suggest, Mr. Kapila, is to look at a process, which is going to depend on the five pillars. The starting point for the process is to do an 'asses mapping'. Each one of these five pillars has a number of activities and requirements, and again those have been laid out in the framework. We could do an 'asses mapping' in terms of where we are vis-a-vis those pillar requirements. There are five pillars and maybe 5 to 6 requirements per pillar. So, there would essentially be about 30 odd requirements laid out by the United Nations. So it's a statistical process. We will create some baseline data. A lot of baseline data is probably already available for an entitlement study. Entitlement is nothing but 'Best in Class', which could mean local best practices and international best practices. Based on the entitlement data, we can carry out gap analysis, based on the pillars again, and come out with some improvement actions and future state mapping. These are all statistical tools that are available with us today. Once we know the steps that need to be taken, we can conduct a pilot study to prove conclusively that the actions we are taking would result in reduction in road fatalities. We may incorporate further improvements, if required, based on the results from the pilot study. We can then replicate the process across a wider geographical area. So that's from a road map.

So, I think if you could lead the entire forum by forming sub-committees for each one of those 30 odd projects under the five pillars and get industry participation,

civil society participation and so forth, the sum total of all of that could actually become a National Strategic Plan for the Republic of India. In summary, the current understanding of the problem is not the issue, we need to do a much deeper dive into the strategic framework elements and implement actions with relevant data. Thank you.

**Mr. Kapila:** Well, thank you, Mr. Mukund. It is a good suggestion. But as it would delay the process of finalization of the plan, I don't think it is recommended at this juncture. What we need to do is to make an action plan with whatever we have and we can amend or modify it as we move on and proceed further. May I ask Mr. Puri to kindly bring out his points.

**Mr. Puri:** Good evening. I endorse the views of my fellow panelists. I will touch upon one specific point that is construction of forgiving roads. Now whatever the codal specifications, the guidelines, the manuals which are prepared by an agency like Indian Roads Congress, or whatever specifications we have at the time of tendering, should not be diluted for economic considerations. Because, if I have less money, I am not supposed to eat bad food. I may have to eat less food, but it must be healthy food. Therefore, if any kind of dilution to the specifications under various schedules or special conditions of specification in the contract is done owing to financial constraints, the casualty is the safety on the road. If we remove the service roads, the flyovers, the underpasses, or crash barriers, these would result in casualties. So, I would strongly like to suggest that these should remain included. If there is a financial constraint, the scope of work itself may be reduced, please don't dilute the specifications. Then only we can achieve safe roads, forgiving roads.

**Mr. Kapila:** Thank you very much Mr. Puri. May I request Mr. Jerzyk to kindly add any points that he may have.

**Mr. Jerzyk:** Thank you very much. There have been some really great recommendations and suggestions thus far. I am thinking of adding some and reinforcing some with other comments that I think are really integral to developing safe infrastructure. A lot of it really starts with standards development, in having a process and in the ability to write uniform best practices. When we do that we have to strike a balance for all stakeholders. All the stakeholders in the equation of safety have to be present at the table, because everybody brings his own perspective and a different view that can be really beneficial to elevate the standards to a higher level. We talked about process earlier. In process for

implementing, the standards that have been developed really go hand in glove with education and enforcement. We must have the right process to develop the standards. We have to educate and enforce those standards all the way through the system so that everybody knows what the requirements and expectations in the benchmark are going forward. From there, I think we need a verification process, the one that assures that the standards are being met, both new and also in use. In having the ability to travel all around the world, you really get to see some opportunities where the best practices are in place. In those cases, the standards are in place, where quality of materials and products are being maintained, and being kept up to standards, and having quality standards in place so that devices and infrastructure that are no longer appropriate should be taken out and changed or updated as new information becomes available. Performance standards are really the key in its functioning and determining the needs and then developing standards that have the performance element so that they meet the requirements. That is a critical element. We may allow standard writers and practitioners to attend events like this. It is going to allow for information sharing for best practices from around the world. So these types of global forums, where practitioners get together, discuss their issues, see the types of devices and data that they can bring back and implement is a real key positive step for moving forward and then to reward the best practices. We must make sure that we recognize people for the right achievements Many times; we focus on high areas which may not be meeting the requirements. At times, we do not spend enough time on the people who are doing the right things and achieving the goals that are out there.

Finally, dedicated funding is also required. We experience similar situation in the United States. We have the Highway Safety Improvement Programme Funds, which are dedicated funds for safety. But ultimately, when the funds are needed, we have to look for the funds to be able to implement the safety programmes that are needed. You have to be really diligent in assuring that the funding is there to make it work. In conclusion, we have a wonderful saying that they have used for years and it is 'Just Do It'. It gets to a point, where you need to start making progress. We have got a real aggressive goal in front of us and we really have to get started on implementation of a lot of these items in order to move safety forward. Thank you very much.

**Mr. Kapila :** May I now request Mr. Sinha to kindly give his views.

**Mr. Sinha:** Thank you Sir. Good evening. First of all we should tackle this problem scientifically. One thing which we have seen is the absence of traffic engineering in our roads and highways systems. Implementation of proper traffic engineering on our roads is one of the essential premises before we start on road safety. We see the chaos on our roads. I think, after adoption of proper traffic engineering, as we see in many developed countries, we will reach a stage where we can implement safety measures. So this is something very important. Presently, it is being managed by police or other departments. In Kerala, they have trained the police also for traffic engineering. This was shown in an earlier session today. This is a basic concept and the mindset needs to be changed.

My second point is about the forgiving roads. MORT&H and IRF, through MORT&H, had made certain recommendations about forgiving roads. Let us first implement them, rather than questioning or raising doubts about the implications and then look for results.

The safety features in vehicles have been lowered over time in India, just to reduce the cost. This came out in one of the sessions. My point is that these should rather be raised. Further, the proportion of car in motor vehicles has gone up so high that we need to upgrade the safety standards to what is prevailing in many advanced countries.

I have got two other points. One is about the safety at the junction of main and side roads. Some states, like Haryana, have done experiments by providing rumble strips on side roads, just at the junction. As was mentioned in an earlier presentation, that has created lot of positive impact on safety. This requires very minimal funds and should be made mandatory.

My next recommendation is about road maintenance. The funds for road maintenance have always been scarce. Many times, accidents happen due to potholes and poor condition of the road. This is something which we need to look into and take care of very urgently.

Lastly, I agree with Mr. Modi about the monitoring system and add that some intermediate targets also should be fixed in respect of all monitoring. Thank you, Sir.

**Mr. Kapila:** I will request Mr. Kandasamy now to kindly add his recommendations.

**Mr. Kandasamy:** Among the earlier IRF suggestions, one was about adoption of the engineering measures. We have accepted it and a policy circular has been issued. Another suggestion of IRF was to have about 10% of the budget for safety. That also has been accepted and from this financial year, MORT&H has provided for about 10% of the budget for safety related works. So whatever suggestions are coming up in this session also will be seriously considered by the Government. DG (Road Development) is also here and I hope that many of the suggestions will get accepted and implemented.

Mr. Rohit Modi mentioned that we should go for something non-conventional also. I fully support his views. We can have penalty on the concessionaire or we can have some sort of star rating and then I don't know whether it will be possible to have a higher toll rate in case the concessionaire is ensuring accident free operations. I also fully agree with Mr. Mukund who talked about pilot projects. The cost benefit of providing these safety measures will become very apparent and the critics, who say that you are over engineering, will be convinced. I think we should go for pilot projects also. Try out the things and then see as to how much the accidents got reduced.

Mr. Jerzyk mentioned about the dedicated fund for road safety. I think that also can be considered. We have a cess on petrol and diesel for road construction, a portion of which is given to Railways for safety related expenditure, railway overbridges etc. I think it is a good suggestion and may be we should consider to have a separate Fund. In case, IRF makes a recommendation to that effect, I think government should consider that also. Thank you.

**Mr. Kapila:** May I request Mr. Patankar to kindly contribute.

**Mr. Patankar:** Yesterday, in my presentation, I mentioned whatever was being done by the National Highways Authority of India. I entirely agree with the Speakers over here with regard to the sort of development that should take place and the free hand that should be provided to the authorities to decide about the improvements that are required to be taken care of in the project. Simultaneously, I would like to mention that we are a big nation with a total road network of more than 4 million kilometers. So it is a huge job that is required to be carried forward. It has been mentioned that we should reach a situation, from where we can start building all our roads as forgiving roads. But we should understand the magnitude of the

investment that will be required. As far as the infrastructure development is concerned the only thing that we need is the funds. We need the capacities around us whether these are in the form of manpower, equipment, technical people, knowhow, or the competent agencies to implement.

I suppose the third and the most important part is the software, which is the road users, the human beings who are using the roads. I think that is the most critical part, which is required to be handled. For achieving safety on the roads, we need to inculcate the sense of responsibility, the sense of belongingness or the ownership among all individuals, who are going to use the roads. Mr. N. K. Sinha mentioned the example of Haryana that the road joining the main highway, the secondary road whether it was national highway to state highway or state highway to MDR, MDR to ODR, the road joining should be provided with the rumble strips. Now we all know that anybody who is joining the highways should slow down and first see the road which he is entering. I mean, if the user behaviour comes to an extent that he takes care of it himself, probably there is nothing more required to be done. Absolutely nothing. There is no need for us to impose anything on the individuals. Particularly with the two-wheelers, speed breakers might turn out to be hazardous. So first and foremost, I think, we need to work out as to what we should do, so that we inculcate that kind of a responsibility in each and every driver. All the road users, whether they are pedestrians or whatever way they are using the road, the requirements of road safety (the sense of responsibility) goes into the blood and it becomes a part of the system. I mean, the driver does not have to think about it, the moment he is coming closer to the main highway, he knows what is to be done and does it in natural course.

The other thing, as far as the infrastructure is concerned, it is our responsibility. As I mentioned, it was a mammoth task. Probably, it will be necessary to categorize the roads in different categories. Even national highways can also be categorized and we must identify some roads where we should not compromise with any physical feature requirement that is required to be provided to make that road a safe road. There are quite a number of PPP projects, where the government does not have to spend anything. In case of a number of projects put for bidding by us, we are getting premium rather than having to put in money from our side. The next category of roads is with which I want to provide service to the people and not providing will not be good. So we provide those roads with lower category and so on and so forth, until the end, I mean right up to the village road. That is how I look at the whole thing. Thank you.

**Mr. Kapila:** Thank you Mr. Patankar for your views. We may differ but I respect the views alright. In my view, no road should be built unless it has zero tolerance. Let us reduce the road construction length from 20 km to 10 km a day, but build only safe roads. It will take us a little longer, but we will still have forgiving roads. But that's a view and government has to take a larger view. They have many other considerations, so we will leave it for them to look at. May I now request Mr. Indoria to kindly give his views.

**Mr. Indoria:** Yes, I had a word with Mr. Kapila and I told him that I will be here as a good listener, as a good student. Because those of us who are involved in highway administration, planning and implementation work under certain circumstances, which many of my senior colleagues know and can appreciate. Recommendations from this kind of conference will really provide us strength to do what we want to do but find resistance otherwise. You know this kind of recommendations is bound to influence the specifications which the MORT&H is responsible and Indian Roads Congress, directly or indirectly. It will influence the policies, for example the Motor Vehicles Act and the Non-Motorized Vehicles Act. Recommendations of this Conference are bound to influence the policies of the government, the strategies, how we go about developing the national highways and also the size of the programmes. Usually the directives are alright, if you do more at less cost. Less cost alright, but whether cost is to be seen in terms of currency or in terms of lives. We have seen provisions, which provide for a surfaced road for a certain minimum volume of traffic, otherwise not. Similar is the case for underpasses. I have always been debating that who says that I have a license to kill 5 but not 10. That effectively translates to it. So safety is not in making only safe roads; we are talking of forgiving roads. Even if a vulnerable road user makes a mistake, our road should be such that nothing unfortunate happens on the road, and I want to assure the audience that these recommendations are taken very seriously in the government. For example, last year, we issued a circular detailing road safety features to be taken care of while designing and planning a road. In the current financial year, in the annual plan we have issued a directive that at least 10% of the budgetary provisions will have to be spent on road safety features only and no compromise on that. If you don't have enough work to do on road safety, forget about your annual plan allocation. We will not use that money elsewhere.

One more thing, we have a plethora of documents, RFQ, RFP, construction agreements, etc, but more relevant for this house are the manuals for design of 2 lane, 4 lane, 6 lane roads. We have been using these documents for quite some time and these documents, like other such documents, are dynamic in nature. They also need periodic revision, for which we should take inputs from the industry and the users. There is already information available on the MORT&H website, IRC website and also the NHAI website inviting comments on various documents. I will use this opportunity to request all the honourable members present here and also request to share with your colleagues to please give your comments on these documents. We intend to collect all these comments, collate them, then maybe have a one day brainstorming session and then come out with concrete recommendations about revisions in the documents. Anyhow, this was besides the brief, sorry for that. I am just using the opportunity. Thank you very much.

**Mr. Kapila:** Thank you, Sir. Now I would like to have the views from the audience. Any suggestions in any of the modules which you would like to make, you are welcome to make. Please identify yourself and make specific recommendation which has not been made earlier. My request is to please not to repeat the recommendations. If a recommendation has already been made, please do not mention it. If it has not been made, please do make it.

#### Suggestions from the Floor

(i) I am representing a company called IVRCL Limited which is a leading company into infrastructure development. I wish to elaborate further on what Mr. Indoria just now spoke about the documents. The tender documents need to be amended with the help of the industry. When the BOQ is prepared, the built-in safety equipment should be a part of the BOQ. Whether it is for NHAI, PWD, CPWD or IRC, we should include items like crash cushions, crash barriers, signaling devices, the work zone signaling devices, ITS systems and illumination on the road should form a part of the BOQ, which will make the contractor to comply with the safety norms. At present, it is optional for the contractor. If you wish, he will implement it, because his bottom line directly gets affected. If it is so important, it should not be optional, it should rather be compulsory for the contractor to provide all these safety equipment, and it should form a part of BOQ documentation.

(ii) I think IRF and the other collaborating agencies need to get more and more vociferous in approach towards implementation of this strategy for the formation of

the road safety agencies at the federal and state levels. Because, what I have learnt during the last two days is that for an emerging economy, 2 to 4% of the GDP lies tied to these Road Traffic Accidents (RTAs) and for a superpower like India, obviously that is a huge deal and something needs to be done about it. My second point is that there seems to be rather dichotomous approach towards enforcement and the RTAs, and the traffic paraphernalia. Because, there are several complexities involved and they need to be addressed. For instance, you need to let the citizens know that the implications for drink and drive are going to be immense, so they should avoid any such violation. I mean that they should be made to feel more responsible.

One important thing in the presentation of Mr. Patankar yesterday, was that 78% of the road deaths are caused due to the road user behavior. The driver fault is a very important cause, as in our country, we find that driving license is given very easily. I read in an article that in India 50% of the people get license by giving money, without knowing how to drive. They just give money and get the license. If this is true, 50% of the people who are driving either do not know proper driving or lack driving skills. So my contention is that we should first ensure that licensing is very strict. Secondly, the driving skills of the license holders should be reviewed, after say every two years or at the time of renewal of the license, so that when they come again on the road to drive, we are sure that they have proper driving skills. Another thing which I want is more publicity for wider public information. Thank you.

(iv) Bold statements for propagating zero tolerance in road performance have been made. Mr. Patankar mentioned that there was no dearth of money for the BOT projects, where we get premium. Mr. Indoria said that there is a provision of 10% for road safety in the financial sanctions. Mr. Puri also appreciated the vital importance of the road safety aspect. But if zero tolerance is applied to the road industry, it should also be applied to the clients. Why do we then succumb to the whims and fancies of Planning Commission or other bodies, to cut down the cost. So, if we succumb, we should make the sanctioning authority as well as the implementing authority, PDs, Executive Engineers of the PWDs also responsible and accountable for this zero tolerance. So, they should not succumb to the pressure from anywhere.

(v) I wish to make two points. One is that having recognized that fatal accidents have become a disease, the immediate action that we should take up is launching the black spot eradication programme, which is practiced in many developing and developed countries. They take up such campaigns after every 10 to 15 year

intervals. The second point is that reports, of most of the safety audits that are conducted, remain confined only to the shelves. When we try to look for the reasons and study the situation in countries like Japan, New Zealand and Sweden, we find that the main difference is that the road safety auditor has enormous powers, even to issue security notice for a lapse in the road safety issues. So, there he commands a lot of respect; but in our conditions, the road safety auditor has to beg for the required information. Here, the auditor has to go to the concessionaire and request for the necessary details. So, if we have made up our mind towards reduction of fatalities, we should take up this issue appropriately; whether it requires a new legislation or whether it requires the modification in any government procedure. The third point is that we should also keep some case studies, in the programme of such conference, for informing about the impact after adoption of the road safety steps.

(vi) I just want to congratulate you for this Conference. I think, it is very appropriate and timely for India. Your approach to actions at national level is very appropriate and it is important that you focus on national actions. But just one bit of advice, as a lesson learnt from a number of other countries including Australia that once you get down below national actions, a lot of countries learn too late to balance their programmes and actions between urban areas and rural areas. In Australia, we learnt this lesson at last and very late. We now have an appropriate split of action between urban and rural areas, with appropriate split of investments. So, in Australia, now we have 1/3<sup>rd</sup> of all investment that goes to rural road safety and rest to urban road safety. My only suggestion therefore is that learn that lesson that beyond the national actions, think about how much you want to focus in rural areas, rural communities, rural roads as well as urban areas.

(vii) It is indeed a great pleasure to get this opportunity to present my views. I would like to give one suggestion with reference to the different regions and the causes of accidents and deaths. First, let us see what was the road length before independence, at the time of independence and at present. How many vehicles have been added and how the road length has improved. That has to be done. Mr. Bandyopadhyay presented very good statistics. The existing roads are very deteriorated. Even in the state capitals, practically there are no passages or footpaths. So, I am very happy that all these factors are being considered for the upcoming roads, but I suggest that the existing roads also should be maintained at least to the minimum levels.

**Mr. Kapila:** Mr. Modi, would you like to comment?

**Mr. Modi:** I just wanted to say a very simple thing. When India today aspires to become a global super power, I think, it can no more behave like a beggar or a poor person saying, "I don't have resources". Let us understand fundamentally one thing. If we aspire to have world class infrastructure, it will come at world class price. You cannot say, "I will have world class infrastructure at my Indian prices". It doesn't happen, and I think that is the fundamental mindset, which should be stated at the beginning that if India today wants to take its position on the high alter of developed economies, we need to have world class infrastructure and world class provision of services, which do not get generated or produced at any prices except the world class prices. That is the simple point which I want to say and I think as Indians, as people who aspire, there this is what we should say that I will have a world class infrastructure. Safety is just one of the issues and that's the clinch point.

**Mr. Kapila :** Very well said. Yes Mr. Narain.

**Mr. Narain:** Strategy without targets would be just lip sympathy. So I would like to suggest that we should fix some targets. The first target we must fix, as I mentioned last time also, that there was no champion for this cause politically. We need a champion, we could not get one. Can we reiterate that point that we need a champion politically for this cause. Maybe a Cabinet Committee on road safety can be constituted. We have a Cabinet Committee on infrastructure, which could be enlarged to cover road safety. This nation will not work without a champion. It is unfortunate, but essential.

Second, Mr. Kandasamy rightly remarked that 10% of the budget should be straightway earmarked for road safety. In fact, 10% of the budget should be straightway earmarked for each department - Health 10%, Industry 10%, Education 10%, Roads 10%, police 10%. In each department, 10% of the budget should be set out for road safety.

Thirdly, we should fix some target dates for enactment of legislation now itself, no more wait. We should complete all enactment of Motor Vehicles Act and constitute the Road Safety Board by 31<sup>st</sup> March 2012. We have to work.

**Mr. Kapila:** All enactments must have time schedule

**Mr. Narain:** Sir, we have to have a deadline. No more laxity will work. We have had enough. Let's set the targets. If the government does not want reschedule, let the government work on those targets. We support the government. Let the press, media - all support it. Let's have a target. Otherwise, it can't work. Similarly, for Capacity. When you are talking about capacity, we must set targets for the Road sector, for the health sector, for the police and so on. Let's put down those targets in black and white. Without those targets, it is not going work in this country. No lip service will work.

Then, I had one more suggestion, which I think; I took from Mr. Modi's views. Maybe it is very harsh, but I think in all our concessions, let's put zero accident as a target. If any accident happens, penalty will be payable.

**Mr. Kapila:** Zero accident?

**Mr. Narain:** Yes, the money collected as penalty goes to the road safety fund. All concessions will have a zero accident target. If zero appears too tight, maybe we can think of something else.

**Mr. Kapila:** Zero fatality may be better than zero accident.

**Mr. Narain:** So, let's put that as a target now, for all the concessions.

**Mr. Kapila:** All concessions?

**Mr. Narain:** We may have to modify the agreements. At least in respect of some of the roads, which are owned by more prosperous organisations, some money may be contributed towards corporate social responsibility on road safety. Let us put that as the target. Let us also put a target for the Planning Commission. They must earmark and monitor those funds for road safety. Let them monitor the funds, where do they go and how it is not happening. What is the problem being faced, how can it be rationalized and how can it be improved? Let us think of those targets, Sir.

**Mr. Kapila:** Thank you, Sir.

**Mr. Sinha:** What is the incentive to the concessionaire. He says that for a new concession agreement, the client would like to see his safety record. So, if that can

be put in the concession agreement, probably, that could work even on EPC contracts, I mean general cash contracts also. Thank you.

Sir I have a couple of points for enhancing road safety. I just want to add something on increasing awareness and also training certification for the existing drivers towards implementing higher road safety parameters. We should train the drivers on how to save the pedestrians, because vehicle hitting a pedestrian would, of course, kill a pedestrian. So, how to save the pedestrian should be incorporated as a part in the safety action plan. I also want to add that the safety action plan should incorporate warrant development, where to put pedestrian crossing on the link, or where to put pedestrian crossing grade separated.

While preparing DPR and developing the design, I think NHAI and other clients should understand that rushing for completion of DPR within three months, for 200 km road, does not produce a safe design, which can provide more safety on the road. So, the study time should also be provided accordingly. Thank you, Sir.

**Mr. Kapila:** Thank you.

**Prof. Sikdar:** Government officials have very well said that this conference series is highly respected and the recommendations are adopted by the government. It has been shown repeatedly in respect of the past conferences. In fact, the recommendations of the 4<sup>th</sup> Conference were sent as a circular. I suggest that we should have another recommendation on how to implement that circular. Because, while NHAI has sent it to its project sites, the field officers are not clear on how that circular is to be implemented. The field officers of NHAI do not have proper instructions. As a result, there are constant differences between the field officers and the concessionaire, especially when there is change of scope under Section 18. So we need a recommendation regarding implementation of that circular.

**Mr. Patankar:** Not really a response to what you are saying. You are very right when you say that under Section 18, the MCA provides for that the road safety auditor will find out the deficiencies and what all is required to be done, and that will have to be implemented. There could be certain things, which are already the responsibility of the concessionaire under the concession agreement. So, whatever is the

responsibility of the concessionaire under the agreement and it is pointed out by the road safety auditor, has to be fulfilled.

I think, there was another comment somewhere saying that the road safety auditor is a beggar. He is definitely not a beggar. Once the RSA has pointed out the requirements to be carried out, the concessionaire will necessarily have to do them.

The only other issue is with regard to the provisions that we genuinely feel are required. This scenario keeps on changing with time. What is considered as necessary today will have to be done now and there are some areas which may not be found as vulnerable today, may become vulnerable tomorrow. Such changes will keep coming up during the entire concession period. The only thing that we have to look for is the funding source. Further, a mention was made of road safety fund. It is unfortunate that we have not been able to create a road safety fund as of today. We need to work out and deliberate, we had discussed earlier also, as to what could be the alternative sources for a road safety fund. A central road fund has been created by Government earlier. I must congratulate our parliamentarians that it is because of the enactment or the revamping of the road safety fund or the central road fund that the entire programme of the road development really triggered off. That was around year 2000. The same kind of thing will have to be done now for creation of a separate road safety fund, which will really be able to enable us to provide for those interventions. We will then be able to make our existing roads the safer roads. Thank you.

**Audience:** Sir, I think, there will be lot of funds, which we have already been paying in the form of penalty; this is just a suggestion.

**Mr. Patankar:** Just one second. It is my personal opinion. I hold a little different view. He has said that penalties should be there to create a road safety fund. What we are looking forward to achieve is zero penalty, because there will be no accident or death on the road. So, this is not really a mechanism to create a fund. The fund should come from somewhere else. The penalties could be in addition. Let us not depend on the penalties, let us find some other way for creation of funds. Thank you.

**Mr. Kapila:** Well, I know that there are still a lot of points, the whole house has points. But, we have a time constraint. My request, therefore, is that you please

send all your points to me. I will put them in the recommendations and thereafter, we will conclude them, put them for a day on the IRF website. If you still want to respond, do it and then we will send them to the government. So, you will have ample opportunity to add during the 24 hours thereafter. Now, it is time for me to conclude and I would only say a couple of sentences. I like to react to one point that Mr. Modi made out a point, which is very right that we need to have some kind of a zero tolerance of all PPP and BOT projects. How do we achieve it? I think a road safety audit can be carried out on all BOT projects to ascertain what needs to be done to make them zero tolerance roads. We should be prepared as a nation to provide extra time to the BOT concessionaires, say one year extension in concession period, or two years extension to correct the things, so that it is a win-win situation for everyone. We will have roads which are forgiving, we will have concessionaires who are happy, we will have people who travel on those roads, and they will also be happy. This is one model, but that is only a suggestion, it can't be a regulation. It is food for thought for everyone for this evening, and with these words, I would like to thank my Panel and the house here for their wholehearted support and cooperation. I assure you that your recommendations will find full place with us and we will try and see how to consolidate and put them before the Planning Commission and the government. We also had a very hearty comment from our Chief Guest on the first day, when he said that he would consider putting these recommendations and accommodating them in the 12<sup>th</sup> Five Year Plan, so that they get implemented. With these words, I thank you all for being here with us. Thank you very much, once again.

**Comperer:** Thank you, Mr. Kapila. Ladies and gentleman, it has been indeed two very important days of excellent deliberations on various aspects, problems as well as subsequent solutions required for road safety. We just hope and pray that road safety scenario improves for the better, not just in India but across the globe and especially in countries where there is a dire need for it. With this, we conclude our 6<sup>th</sup> IRF Regional Conference. Thank you very much for being here with us; and ladies and gentleman do join us back again after a while for an excellent, scintillating and entertaining cultural evening, which would happen right here in this hall. Do join us back shortly as they make the necessary arrangements on the stage.

