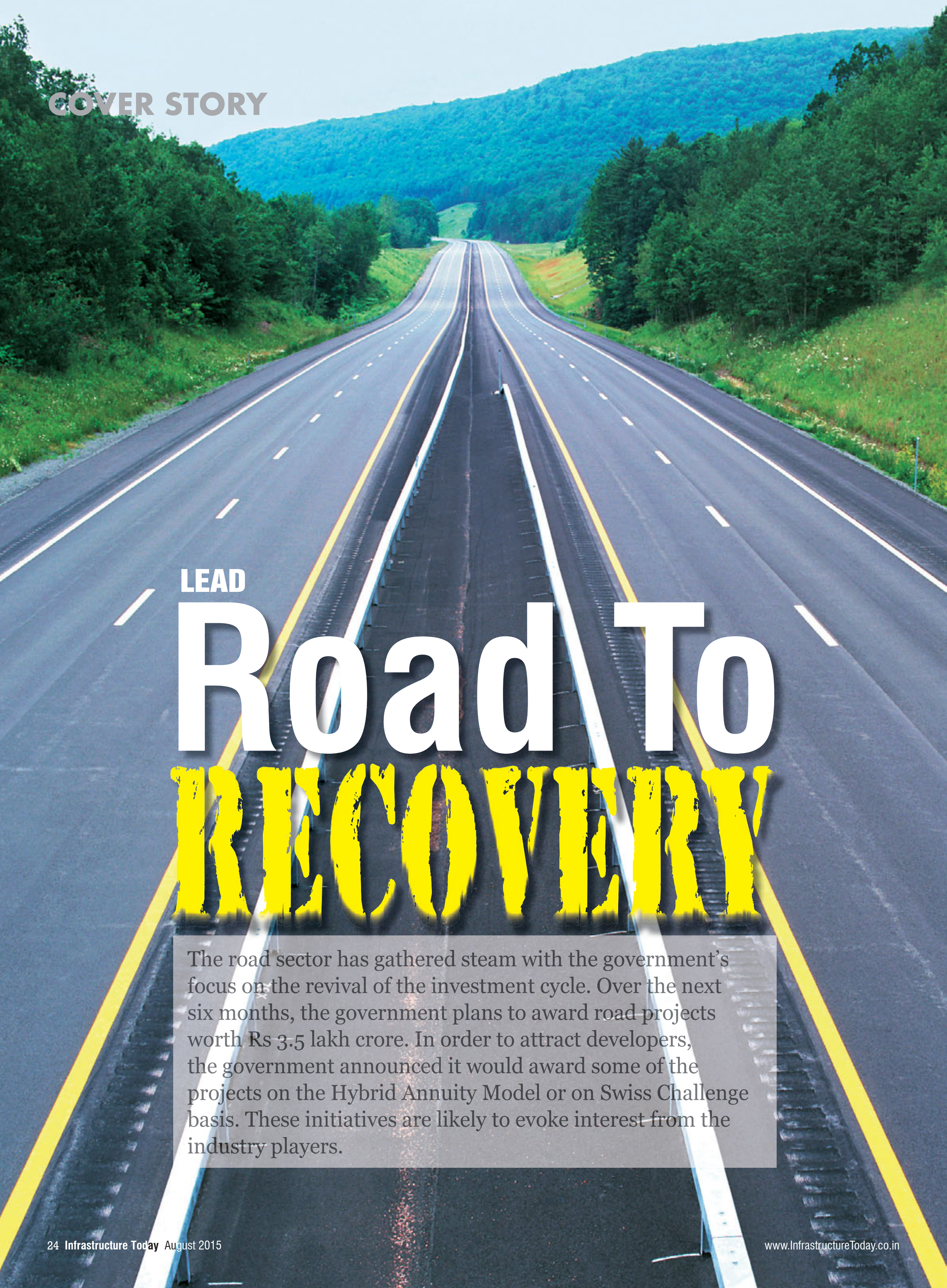


LEAD

Road To RECOVERY

The road sector has gathered steam with the government's focus on the revival of the investment cycle. Over the next six months, the government plans to award road projects worth Rs 3.5 lakh crore. In order to attract developers, the government announced it would award some of the projects on the Hybrid Annuity Model or on Swiss Challenge basis. These initiatives are likely to evoke interest from the industry players.

"American roads are good not because America is rich, but America is rich because American roads are." John F Kennedy

How apt is this saying! A proper network of roads and highways is the lifeblood of any nation and is necessary for economic growth which depends on efficient connectivity and logistics.

The Indian road and highways sector has been in the spotlight for all the good reasons since the government announced the awarding of Rs 3.5 lakh crore road projects in the next six months. Apart from this, the Road Transport and Highways Ministry has set an ambitious target of achieving a construction rate of 30 km of road per day within two years. The government's target of 273 road projects covers an approximate length of 12,900 km worth Rs 1,26,700 crore in 2015-16. These will be under various schemes such as the National Highways Development Programme, Special Accelerated Road Development Programme in North East and Left Wing Extremism. Moreover, the initiatives like the introduction of Hybrid Annuity Model and Swiss Challenge Model may rekindle private investments in the sector.

The road and highways sector has gained traction with all these initiatives. The sector has been passing through one of its worst phases due to the economic slowdown, project delays because of problems over clearances, stretched balance sheets, etc.

As a result, the sector has also seen a drop in the pace of projects being awarded. In spite of the government awarding a total of 20,000 km of projects between 2010 and 2012, most are yet to see the light of day. They have been delayed for various reasons including failure to obtain statutory clearances, lack of developers' ability to achieve financial closure, etc.

POSITIVE MOMENTUM

The government's focus of reviving investments towards the sector is very clear after it hiked allocations to Rs 42,912 crore in the Union Budget as compared to Rs 28,881 crore allocated the previous year.

Further, the government has sanctioned 15 new projects under the National Highway Development Programme (NHDP), and awarded a total of 1,678 km. Earlier, the work on 1,032 km of road length under 11 projects were started between July 2013 and February 2014.

Moreover, the government's milestone of awarding 8,500 km of highway this fiscal is likely to stimulate the developers. The scheme-wise targets are: NHDP, 6,500 km, National Highways Interconnectivity Improvement Programme (NHIIP, 500 km), SARDP-NE, 1,000 km and LWE, 500 km. The revival of 34 stalled projects worth more than Rs 26,000 crore has set the tone for the sector.

> "Earlier in toll projects, the private party had to bear the burden of traffic as well as construction risk."
>
> \- Sanjay Date, *Head-Transportation, ShapoorjiPallonji Infrastructure Capital*

The plans to develop 66,117 km roads under different programmes augur well for the sector. Industry experts are upbeat about these recent developments. According to **Sudhir Hoshing, Joint Managing Director, IRB Infrastructure**, the government's efforts to award more projects is finding takers. "The competition has slowly increased over time. It is not to the level of 2010-2011 but it is quite good as compared to the earlier period."

N Seethaiah, Managing Director, Madhucon Projects Ltd opines,"The government's efforts reflect its plans of allotting more projects either with its own funding or on an Engineering, Procurement and Construction (EPC) mode. The attempt is to bring investment in highways back on track."

Furthermore, the government has announced the exit policy for the developers that allows them to pull out all their equity and exit all operational Build, Operate and Transfer (BOT) projects two years from the commercial operation date. This move may infuse confidence in industry players.

The current scenario in roads development looks promising. **Rishabh Sethi, ED & COO, SPML Infra Ltd** says, "The move will enable the developers to take up fresh projects. It is also expected to attract foreign investors in the sector as completed projects will be on offer for them. The plan, which is being monitored by the Prime Minister himself, will revive the private participation and investment in the road sector, which has almost dried up."

"The current administration is keen to replicate the

Quick Bytes

- India has an extensive road network of 4.86 million km which is the second largest in the world.
- The road network transports more than 60 per cent of all goods in the country and 85 per cent of India's total passenger traffic.
- 100 per cent FDI is allowed under the automatic route in the road and highways sector.
- Environmental clearance is de-linked from forest clearance.

“Govt needs about ₹4 lakh cr for stalled projects”

Bajrang Choudhary, Chief Executive Officer, Infrastructure Project Development, Srei Infrastructure, mentions that once the project execution gains momentum and the ground realities improve, it would send positive signals to both the investors and the lenders to review their investment strategy. Edited excerpts:

Despite the government’s initiatives to revive the sector, why is response lacklustre from developers for the road projects?

Where is the capital to finance new projects? Banks are still sceptical about lending to the infrastructure sector owing to the delays seen in the past. Now add to it the perennial issues like project delays resulting from litigations, time taken in seeking clearances and approvals. Most of the developers are still struggling to put their existing projects back on track. The focus is now more on consolidation rather than expansion of the portfolio. Although the scenario is slowly changing, we don’t expect developers’ enthusiasm for BOT coming back too soon unless there is a noticeable change in project implementation. Once the project execution gains momentum and the ground realities improve, it would send positive signals to both the investors and the lenders to review their investment strategy towards the highways sector.

According to you, what are the challenges while executing execution a road project? What are your strategies to overcome these?

The challenges we face in our projects are the common issues affecting the overall sector. There are projects which are stuck due to RoW, land acquisition and environment clearances which need authorities’ intervention. There are also certain grey areas in Model Concession Agreement (MCA) which doesn’t provide adequate remedial measures to concessionaire in the event of default from the authorities. The local issues are also badly hurting our projects as there has been no mechanism so far to monitor and ensure the compliance of State Support Agreement.

The government has planned to award ₹3.5 lakh crore in the next six months. Do you think that this target is achievable? Apart from land and environment clearances, what steps do you expect from the government to make these projects more attractive?

In a scenario when the government needs about Rs 4 lakh crore in the next four years to complete stalled projects, it might be challenging to restore developers’ interest towards the new projects if lenders remain unconvinced about the future of the sector. Most of the road projects were stuck because of problems in land acquisition, lack of environmental clearances and unfavourable market conditions. The commercial banks that used to dominate infrastructure financing, are too busy repairing their dented balance-sheets.

While the government has been generous about pumping in more funds to the highway sector, what the sector actually needs is inflow of private investment. Though reinventing the PPP model through Hybrid Annuity Model (HAM) is a right step in the right direction since it attempts to de-risk private capital to some extent, the success of the sector would largely depend on the changes in project execution mechanism.

Can you please tell us about the ongoing projects and the projects in the pipeline?

We are an infrastructure developer with our presence across roads, ports, economic zones and the environment sector, amongst others. We have been operating in the Indian highway space since 2006 and have an execution experience of 14 road projects of about 5,412 lane km in PPP mode in both BOT and annuity models. Few of our assets in highway sectors are already operational and the balance would get operational in the next two years.

What are your procurement strategies for equipment and raw material required for your future projects? How do you go about the whole purchase decision process?

We work on a partnership model. We have a competent EPC partner to undertake the turnkey EPC assignment. Furthermore, as we leverage our deep domain knowledge in the equipment financing business, we find ourselves well positioned to procure equipment for our road projects.

Please tell us about your achievements during the year and how that has translated into the company’s core strengths and competencies.

During the period when quite a few developers have been struggling to keep their projects going and a lot of projects are being terminated, we take pride in being able to minimise the time and cost overrun for our projects under construction. We have been also fairly successful in reducing the borrowing costs of the operational or under-construction projects amid these trying times through debt refinancing with our existing lenders.

"Our current order book is over ₹8,300 cr"

N Seethaiah, Managing Director, Madhucon Projects Ltd hopes the government updates project costs in line with the increased cost of construction resources to bring it at par with present market prices. This will help attract wider interest from prospective bidders. Edited excerpts:

The government has planned to award ₹3.5 lakh crore in the next six months. Do you think this target is achievable? Apart from land and environment clearances, what steps do you expect from the government to make these projects more attractive?

The government has planned to raise close to Rs 55,000 crore through auction of 111 EPC projects by the end of the current financial year. Apart from this, the centre has planned to permit the construction of roads from land reclaimed from the sea. This will help the ambitious Rs 9,000 crore Mumbai coastal road project. We hope the government updates the project cost in line with the increased cost of construction resources to bring it at par with the present market price. This will help to attract a wider interest from prospective bidders. The government can offer the original proponent an advantage in a competitive bidding process. In this case, the government should create rewards that satisfy the original proponent while still allowing a truly competitive process.

Can you please tell us about ongoing projects and the projects in the pipeline?

We have built more than 1,115 km of highways. At present, we are executing seven projects of four laning of highways. Four of them are on Build Operate Transfer (BOT) mode. We anticipate we will secure a sizeable share of new projects of those that are in the bidding stage or planned to be awarded in the next six months.

Take us through your order book and backlog. How are you likely to raise funds for these projects? Is it from internal accruals or the debt-equity route?

Our order book is over Rs 8,300 crore and present backlog is about Rs 6,000 crore. We have already in place the project financing plan through debt-equity route for BOT projects. We have planned capital for projects in EPC mode.

What are your procurement strategies for equipment and raw material required for your future projects? How do you go about the whole purchase decision process?

We have established a centralised procurement cell at our head office responsible for uninterrupted supply of materials at various sites as per requirements. They helm the affairs to place orders to manufacturers or dealers well in advance at the time of strategy planning for the project.

What challenges do you face during the execution of a road project? What are your strategies to overcome these?

Our success to early completion is due to our comprehensive planning system which takes a good amount of time. We make it a point to keep an eye on minute planning of details to prevail over any sort of deferrals. Already, we have procured the latest construction equipment and machinery to execute our projects with a better degree of efficiency.

Once a project is bagged, how much time does it actually take to start construction?

Right from the day of emerging as a successful bidder, our construction, procurement and planning team starts working on making a detailed micro level resource based programme. We make the plan that needs to be implemented from mobilisation to accomplishment of the project from the start of the contract period. This enables us to successfully complete the project in the scheduled time.

At the contractor level, what kinds of challenges do you face during the execution of a road project?

The construction challenges due to local obstruction are the biggest problem. This may cause a large part of the time delays. We make our best efforts to manage such situations by giving employment to locals, taking eco-social development measures and any other measures that helps.

Please tell us about your achievements during the year.

We have recently secured a prestigious highway project worth Rs 397 crore for the improvement or augmentation of two laning with paved shoulders. This will be at Nagapattinam – Thanjavur, section of NH-67 under NHDP-III on EPC mode, in Tamil Nadu. We expect to secure more projects this year to increase our order book significantly.

How would you differentiate the current scenario of the road sector, comparing it with the UPA regime?

Earlier, an average 11 km of road was built per day. Now, the government has set itself an ambitious plan of building 30 km of roads a day. The government's overall performance has been quite average over the past year. The highways sector has received the highest support in the recent Union Budget. Moreover, the introduction of the hybrid annuity model is a good move and it will help in the coming days.

273 Projects to be Awarded in 2015-16

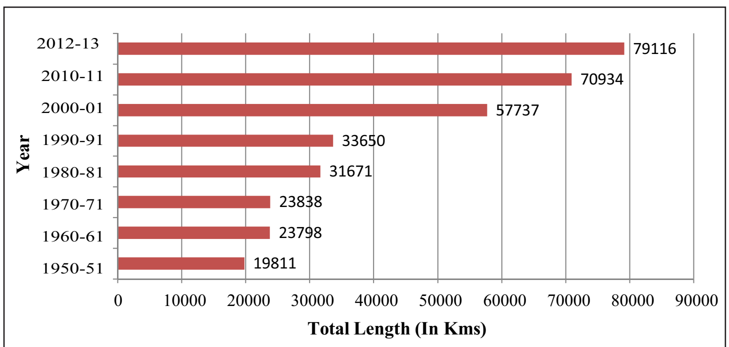
States/UT/Scheme	No of Projects	Length (Km)	Tentative cost (₹ crore)
Andhra Pradesh	4	217	840
Assam	3	14	37
Bihar	8	222	2,237
Chhattisgarh	3	149	3,522
Goa	6	36	1,124
Gujarat	2	103	109
Haryana	2	34	87
Himachal Pradesh	4	93	50
Jammu & Kashmir	2	5	21
Karnataka	11	273	840
Madhya Pradesh	3	136	143
Maharashtra	2	7	56
Manipur	4	39	107
Odisha	7	254	1,065
Puducherry	1	10	8
Punjab	1	11	51
Rajasthan	8	63	251
Tamil Nadu	5	145	387
Telangana	1	41	153
Uttar Prdesh	11	589	3,235
LWE	11	237	355
NHDP-IV A	47	3171	23,885
NHIIP	5	357	1,868
BRO	5	116	192

Source: PIB

success of the Atal Bihari Vajpayee government's mega road building programme to push for growth and investment," he adds.

The plan to reach 1,00,000 km of national highway by the end of 2017 seems to be a motivation. The mega push by the current government in road development

Total length of National Highways (in km) in India: 1950-51 to 2012-13



Source: MoRTH

The government has sanctioned 15 new projects under the National Highway Development Programme (NHDP), and awarded a total of 1,678 km.

was missing in the earlier regime. Industry pundits attribute the slump in the sector to aggressive bidding leading to the negative projection of traffic against the high premium. As a result, the projects have lost their sheen, making them unviable.

The positive vibes from the government like setting up of National Infrastructure Investment Fund (NIIF), 5/25 mechanism for re-financing, easier exit norms for highway projects and a facilitating mechanism for quick environment clearances will give a much needed fillip.

While terming all these reforms necessary and long overdue, **Bajrang Choudhary, Chief Executive Officer, Infrastructure Project Development, Srei Infrastructure**, explains, "The previous government failed in addressing the key industry concerns and faltered in taking adequate remedial measures when most of the developers were badly hit due to a liquidity crisis, stretched balance sheets and lower-than-anticipated traffic on their highways. When the industry was facing its worst crisis in a decade, policy paralysis added to its woes."

Some industry players have a different take on this. According to **M Murali, Director General, National Highways Builders Federation**, India has witnessed a slight improvement in investors' sentiments. However, it is not as good as desired after the preceding lull in the sector of three to four years.

> Hybrid Annuity Model will induce the investors to participate in the projects."
>
> \- Vishwas Udgirkar, *Senior Director, Deloitte*

K K Mohanty, Managing Director, Gammon Infrastructure Projects, concurs, "The sentiment has improved. However, on the ground, this sentiment has not translated into real results."

"We expect some concrete steps as far as the governance is concerned and some equitable solution for the stalled projects. It will lead to generation of confidence among the industry players, especially the different stakeholders," he adds.

EXPLORING MODELS

Historically, the government executes the road projects on an EPC or Public Private Partnership (PPP) model. In EPC, the government funds the project entirely. The major risk involved in BOT projects of PPP mode is the management of funds that lie entirely with the private player. As these projects require a long gestation period, the further delay in acquiring land or Right of Way (RoW), clearances for rail over-bridges (RoBs) and rail under-bridges (RuBs), shifting of the utilities like electrical lines, water pipelines, sewer lines, telecommunication lines, etc. leads to both time and cost overruns. In addition, these projects are vulnerable to traffic. Due to the problems associated with BOT models, the government has explored a slew of new models after consultations with various stakeholders like developers and banks. In the past, many projects were stalled due to aggressive bidding from the developers and lack of a proper arbitration mechanism from NHAI, putting a strain on the banking system. Due to their funds getting blocked, the banking system now has limited capacity in terms of financing new projects.

> India has witnessed a slight improvement in investors' sentiments."
>
> \- M Murali, *Director General, National Highways Builders Federation*

Types of PPP Models in Roads

BOT (Toll)	BOT (Annuity)	OMT
Road alignment, location of structures, LA, environment clearance - authority	Road alignment, location of structures, LA, environment clearance - authority	The concessionaire is handed over developed road for O&M
tructural design, finance, construction, O&M - concessionaire	Structural design, finance, construction, O&M - concessionaire	No capacity augmentation
Tolling - concessionaire on the basis of GoI toll policy	Tolling, if any, is done by the authority separately	Tolling is done by the concessionaire as per GoI toll policy
Concession period, depending on road capacity, subject to maximum 30 years	The concessionaire is paid fixed semi-annual annuity	Concessionaire pays an annual concession fee to authority
	Concession period is generally 20/ 17 years	Concession period is 4-9 years

Source: E&Y

SPML

"Planning to add ₹2,000-3,000 cr new projects"

Rishabh Sethi, ED & COO, SPML Infra Ltd, says that with a number of reforms planned and currently under implementation by the government, there will be good interest from private companies to invest in roads.

What do you think are the differences in roads and highways today compared with the UPA regime?

The government has panned a mega push for the sector and has an ambitious target to award highway projects worth Rs 3.5 lakh crore in the next six months. The current administration is keen to replicate the success of the Atal Bihari Vajpayee government's mega road building programme to push for growth and investment. The plan to reach 1,00,000 km of national highway by the end of 2017 is well motivated. This push was missing in the earlier regime and there were delays in awarding road projects due to litigations, restructuring and liquidity crunch.

Why did developers shy away from investing in road projects despite the government's move to award 8,000 km of projects worth ₹1 lakh crore in 2014-15? It also committed to award projects worth ₹3.5 lakh crore in the next six months this fiscal.

It is stated that the road sector in India will undergo revolutionary changes. Transport and shipping will be able to contribute at least two per cent increase in the country's GDP in two years. With a number of reforms planned and being implemented by the current government, we feel that there will be good interest from the private companies to invest in the road sector now.

The government has planned to award ₹3.5 lakh crore in the next six months. Do you think this target is achievable? Apart from land and environment clearances, what steps do you expect from the government to make these projects more attractive?

We are optimistic about the target fixed by the government in view of the conducive environment being created with a number of reforms. The government has initiated a number of measures to increase the speed of construction, including the hybrid annuity model that reallocates the risk-sharing of road construction. The Ministry is trying to remove hurdles facing Rs 1.5 lakh crore projects and bring a new Motor Vehicles Bill designed and framed with the best practices of advanced countries that would reduce road accidents drastically in the country.

With land acquisition and environment clearances to be faster and smoother than before, the development would be fast and we may be able to achieve the target of building 30 km of road a day. The issues involving forest and environment clearances, defence and railway objections and projects concerning rail overbridges stuck for years must be dealt with in a timely manner to avoid delays in project execution.

I believe if the government succeeds in getting the proposed US funding and finances from insurance and pension funds for the road development apart from their own budgets, this target is achievable.

Can you please tell us about ongoing projects and projects in the pipeline?

SPML has completed and commissioned a number of road and bridge projects, including state highways of almost 520 km in Bihar, Madhya Pradesh, Rajasthan and Tamil Nadu. We have also completed a Y-shaped flyover at Rangrajapuram and a Rail underbridge along with service roads and a cycle track at Villivakkam near Chennai Railway Station. The 212 km Jaipur-Bhilwara toll toad has reduced the travel time from Jaipur to Bhilwara by almost an hour and improved the overall economic development of en-route towns and villages.

Take us through your order book and backlog. How are you likely to raise funds for these projects? Is it from internal accruals or debt-equity route?

Our Project Management System includes conceptualisation and implementation with SAP-Enterprise Resource Planning applications and Quality Management Systems to undertake all kinds of projects of any magnitude. At present, SPML Infra has an order book position close to Rs 5,500 crore and we are expecting to add another Rs 2,000-3,000 crore worth new projects in the current fiscal.

What challenges do you face during the execution of a road project? What are your strategies to overcome these?

A major concern is a shortage of quality manpower, apart from timely availability of raw material. We deal with these issues through regular coordination with clients. We train operators, technicians, engineers and supervisors to create the skilled manpower we need. We impart technical know-how of the new equipment encompassing safety operation procedures and maintenance, fault diagnosis and troubleshooting, quality assurance and control, health, safety and environment protection, economics of the new technology adaptability and future upgrades.

For the complete interview log on to www.infrastructuretoday.co.in

Project Awarded Between 2015-16 Status as on 30th June 2015

Sr No	Stretch	NH No	Length (km)	Total Project Cost (₹Cr)	State	Award Date	Category	Agency
Project Awarded Under BOT								
1	Four Laning of Solapur - Bijapur	13	109.08	1377.54	Maharashtra	May 2015	NHDP Phase III	Uniquest Infra Ventures Pvt Ltd
2	4 Laning of Guna to Biaora	3	93.5	1012.9	Madhya Pradesh	Jun 2015	NHDP PHASE IV	M/s Dilip Buildcon Ltd
3	4 Laning of Biaora - Dewas	3	141.26	1583.79	Madhya Pradesh	Jun 2015	NHDP PHASE IV	M/s Oriental Structural Engineers Pvt Ltd
Project Awarded Under EPC								
4	4 Laning of NH-31D from Ghoshpukur - Salsalabari (km 0.00 to km 83.785)	31-D	83.785	1083	West Bengal	Jun 2015	EW	L & T Ltd
5	Four Laning of Madurai - Ramanathapuram (km 5 to km 81) and Two Laning with PS km 81 to km 120	49	115	1387.11	Tamil Nadu	Apr 2015	NHDP PHASE III	KNR Construction Ltd
6	UP/Haryana border - Yamuna Nagar -Saha- Barwala - Panchkula (PKG - 1)	73	44.57	600.85	Haryana	May 2015	NHDP Phase III	Sadbhav Engineering Ltd
7	UP/Haryana border - Yamuna Nagar -Saha- Barwala - Panchkula (PKG - 2)	73	41.79	562.34	Haryana	May 2015	NHDP Phase III	Sadbhav Engineering Ltd
8	4 Laning of Kazhakkottam to Mukkola section of NH-47	47	26.5	845.24	Kerala	May 2015	NHDP Phase III	KNR Constructions Ltd
9	2 Laning with PS of Gulabpura - Uniara	148-D	203.97	597	Rajasthan	Jun 2015	NHDP PHASE IV	M/s Dilip Buildcon Ltd - Ramjit Buildcon Lt

Source: NHAI

As a result, due to capacity constraint in terms of investment, the developers are not too keen to take the risk of traffic. So, the government has come out with a new model called Hybrid Annuity Model where traffic risk will not be passed on to the developers.

Targets and Performance

Efficiency Parameters	Achievement During 2013-14	Target 2014-15
Average Construction of road per kilometer	11.67 Km	17.26 Km
Average award of works in km/day	8.68	23.28
Road Length to be Awarded (Km)	3,419 (April- Oct 2014)	8,500
Completion of Construction (Km)	1,984	6,300

Source: MoRTH

Vishwas Udgirkar, Senior Director, Deloitte feels that the government is optimistic about this model. It will induce the investors to participate in the projects.

Under this model, the government will bear a higher proportion of risk. It will provide 40 per cent of project cost to the developer which will reduce the upfront funding required to be made by the private developer. The developer will fund the remaining 60 per cent. The NHAI will collect toll and refund the amount in instalments to the developer over a period of 15-20 years. In this model, the risk of revenue collection is not associated with the developer.

"It gives a comfort level to borrow from banks as the returns on investment is pre-decided. This model will help the government to award a number of projects as the investment will be reduced compared with the EPC model," hopes Sethi.

While terming the introduction of the Hybrid Annuity as a good move, **Sanjay Date, Head-**

> "Earlier models for execution of road projects were not defective. However, it should be implemented properly."
>
> - K K Mohanty, *Managing Director, Gammon Infrastructure Projects*

Transportation, Shapoorji Pallonji Infrastructure Capital emphatically says, "Earlier in toll projects, the private party had to bear the burden of traffic as well as construction risk. As compared to this, in Hybrid Annuity Model, it has to take lower risks. But we have yet to witness its implementation." In addition, the government is planning to introduce the Swiss Challenge System' for bidding out projects in order to attract private investors. Under this, private investors can conceptualise and offer a project for evaluation to the government. It also allows third parties to make better offers for a project during a defined period which helps to keep development costs within limits. However, this system has not proved to be very successful elsewhere as the private developer is required to make a good initial investment under this model, and which will be difficult to recover unless it wins the contract.

Most of the industry experts are not in favour of the Swiss Challenge Model. "This model has not found too much success in India in the core infrastructure sector. Moreover, the projects under Swiss Challenge Model doesn't fit the Indian context. There is no budgetary allocation for the projects conceived by the private developer, " opines **Choudhary**.

Udgirkar feels that the Swiss Challenge model will take some time to hit the road as more road projects are identified by the government. Further, the government is also not fully clear about issues related to this model.

FEASIBLE MODEL?

When it comes to the execution of a project, Hoshing gives importance to the viability of the project. "Enough traffic and an optimum cost make the project profitable. The project should generate enough revenue to service the debt that the developer takes," he adds.

"Earlier models were not defective. There is nothing wrong in PPP model. However, it should be implemented properly," opines Mohanty.

While talking about the government's recent target of achieving the speed of 30 km per day, Udgirkar suggests, "The target of 20 or 30 km is not important. Achievement should be measured in terms of completion. The pressure to award projects results in handing them out improperly. Therefore, project viability will be tinkered with in this case. Once the government is focused, projects will be completed on time and more developers will come forward."

STUMBLING BLOCKS

According to the report of the Ministry of Statistics and Program Implementation (MoSPI), out of 36 roads projects, four projects are on schedule while 29 are delayed. The total original cost of these 36 projects is Rs 55,380 crore while the anticipated completion cost is Rs 56,560 crore, reflecting a cost overrun of 2.1 per cent (spread over all road sector projects). The expenditure incurred on these projects till March 2015 is Rs 43,310.11 crore, which is 78.2 per cent of the original cost of the projects.

Industry pundits attribute the delay in these 29 projects to land acquisition, rehabilitation and resettlement, law and order problems, environment

Year-wise Construction of National Highways (km)

Source: MoRTH

or wildlife and security clearances. There are also problems of geological uncertainties, increase in or change of scope of work, non-availability of good contractors, contractual disputes, non-performance or poor participation of the contractor.

The availability of Right of Way at site is the most demanding concern for all project developers, as the authorities generally hands over site areas in bits and pieces. "It does not help to make the required progress. If the RoW and MoEF clearances are in place, then a banker conveniently extends all indispensable provision to obtain financial closure," says Seethaiah.

Road projects are also capital-intensive. As a result, due to delays in execution, many projects have attained the status of Non Performing Assets (NPAs), putting a pressure on financial institutions. As a result, banks are still sceptical about lending to the infrastructure sector owing to the delays seen in the past.

The government needs to remove bottlenecks like land acquisition and bring in congenial policies and reforms.

The debt-laden private promoters are not in a position to take up new projects. To this, Choudhary suggests, "We need the Government to continue their focus first on reviving the stalled projects and facilitate fast-track construction of these projects. Although most of these road projects were stuck because of problems in land acquisition, lack of environmental clearances and unfavourable market conditions, the commercial banks that used to dominate infrastructure financing, are too busy repairing their dented balance-sheets."

The sector is facing hurdles in terms of finding skilled manpower and technical competencies to manage EPC assignments. "We rely on our overseas partners to get the technical edge over our peers in highway development. We have a strong relationship with globally reputed companies from Spain, Oman, Germany, South Korea, China and we work with them to benefit from their specialised technical expertise," adds Choudhary.

"The competition has slowly increased over time. It is not to the level of 2010-2011 but it is quite good as compared to the earlier period."

- Sudhir Hoshing, *Joint Managing Director, IRB Infrastructure*

WAY FORWARD

The industry players feel that the government needs to remove the bottlenecks like land acquisition and bring in congenial policies and reforms at the grass-roots level in order to reap the benefits of slightly enhanced sentiments of the players.

"Before bidding out any project, the government needs to prepare a detailed project report (DPR), and feasibility reports so that it can help to estimate the realistic cost," suggests Date.

"There is a requirement for facilitating all clearances at a single window. It is the only way the developers can complete the project in time. The Government should explore the possibilities of more funds to the sector other than the banks at a sustainable and low interest rate," concludes M Murali.

IT RECOMMENDATIONS

- Before bidding out any project, the government should prepare a detailed project report.
- In order to expedite the pace of the project, the government should facilitate all clearances at a single point.
- NHAI should take the responsibility for the execution or coordination of the projects. Disputes should be settled through quick arbitration. NHAI should accept arbitration awards and go to the courts only in exceptional cases.
- The government requires to accept the actual logical cause of delay in its end – which may include clearances like land acquisition, railway permissions, and so on – and convert it to financial terms in the form of fare compensation.
- The government should update the project cost in line with the increased cost of construction resources to bring it at par with the current market situation.
- The government should remove the bottleneck of the bureaucracy at the grassroots level .
- The government needs to explore other ways of providing finance at competitive interest rates. IT