





# Lessons for making PPPs a success

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International Road Federation



# Agenda

- Review of international experience
- Low traffic roads
- IRF's role





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# What are PPPs?



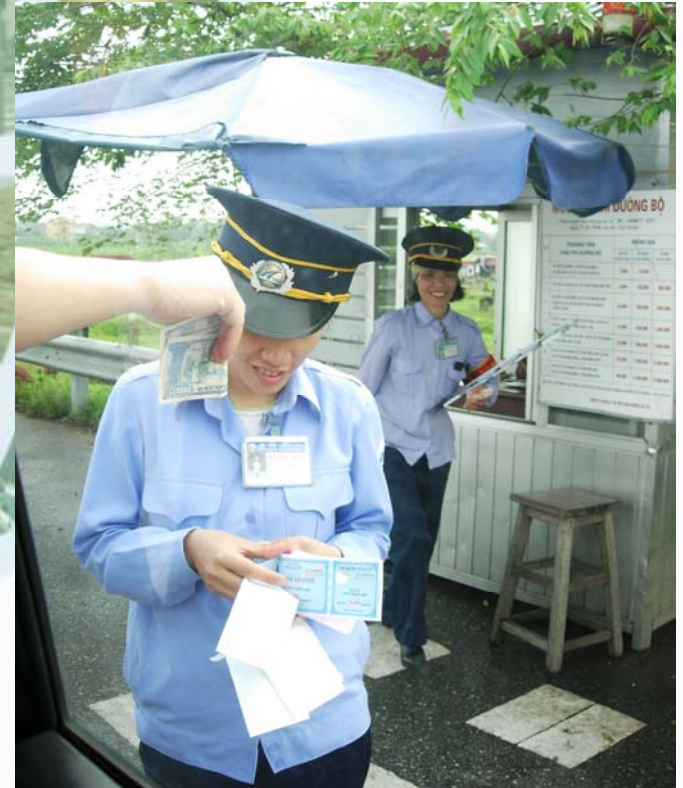
- PPPs are poorly understood.
- Frequently governments look at PPPs only as the answer to their funding shortages
- Benefits in terms of quality, management and creativity for network development are not sufficiently appreciated



# Global trends



- Global trend towards payment for roads based on road usage.





# Galileo system

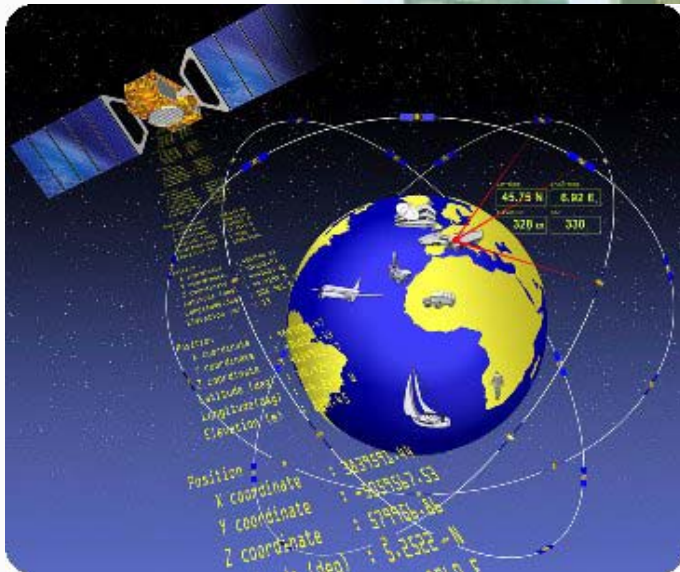
- Galileo satellite system - from 2010.





# Galileo system

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- Global positioning enables vehicle and container tracking.

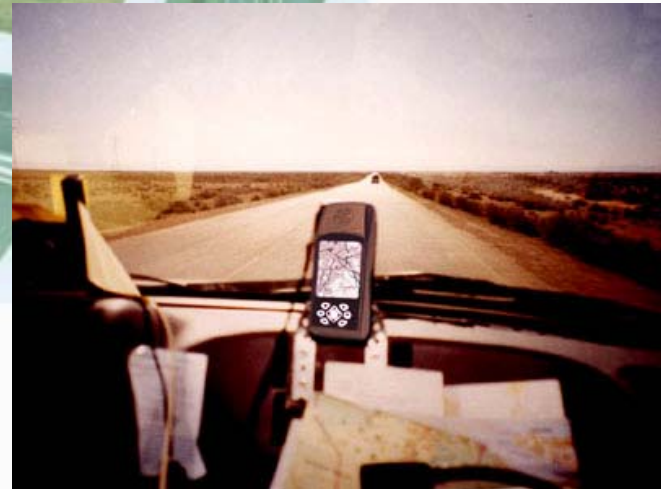






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# Galileo system

- Galileo satellite system - from 2010.
- Global positioning enables vehicle and container tracking.
- Provides route guidance and ITS applications.
- Road charging based on distance travelled.
- Enables real-time monitoring of disasters and coordination of humanitarian operations.

# Key steps at national level



- Consistency of objectives & policies
- Transparency & predictability of policies
- Coordination of IFI activities
- Appropriate legislation (concessions, environment, procurement)
- Clear role for state authorities



# Key steps at national level



- Identification and prioritisation of projects
- Essential that the country be looked at as a whole, not a collection of state, regional and local priorities
- Must involve users and private sector
- Must have a strategic approach involving public and private sectors for all transport methods

# Key steps at project level



- Appropriate project preparation - (feasibility study & environmental impact assessment)
- Proper procurement procedures (Romanian experience)
- Properly evaluated financing plan
- Suitable implementation procedures & proper monitoring
- Provisions for the future project operation & maintenance

# “Musts” for successful PPPs



Above all:

- Don't give the private sector the tough projects and keep the good ones for the public sector
- Easy projects and gradual private sector involvement will build success

# “Musts” for successful PPPs



- Public sector political commitment
- Focused, dedicated and experienced public sector team – PPP task force
- Clear legal and institutional framework
- Transparent & competitive procurement
- Realistic risk sharing





# Agenda

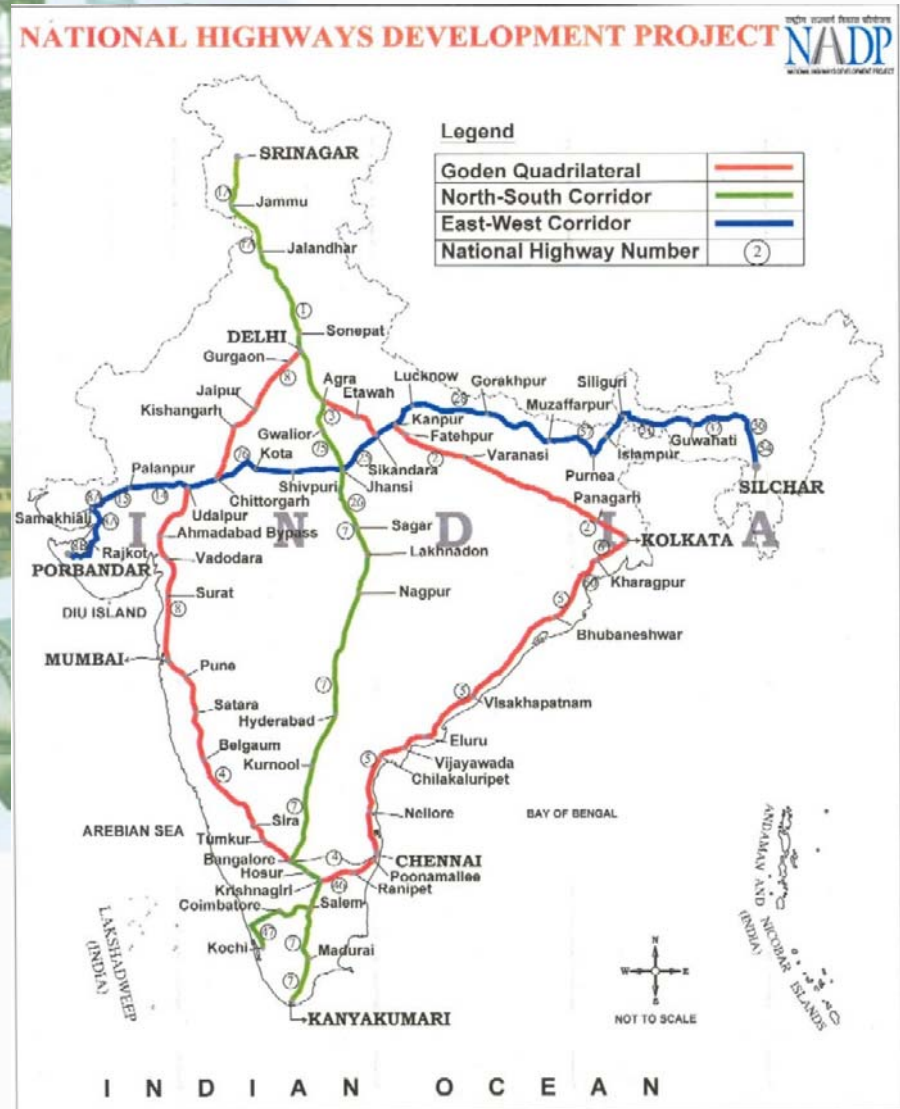
- ✓ **Review of international experience**
- **Low traffic roads**
- **IRF's role**



# National Highways Development Project - India



- € 40 bn PPPs over 5 years



# Tamil Nadu



## Road Network of Tamilnadu



# Tamil Nadu Road Development Company Ltd



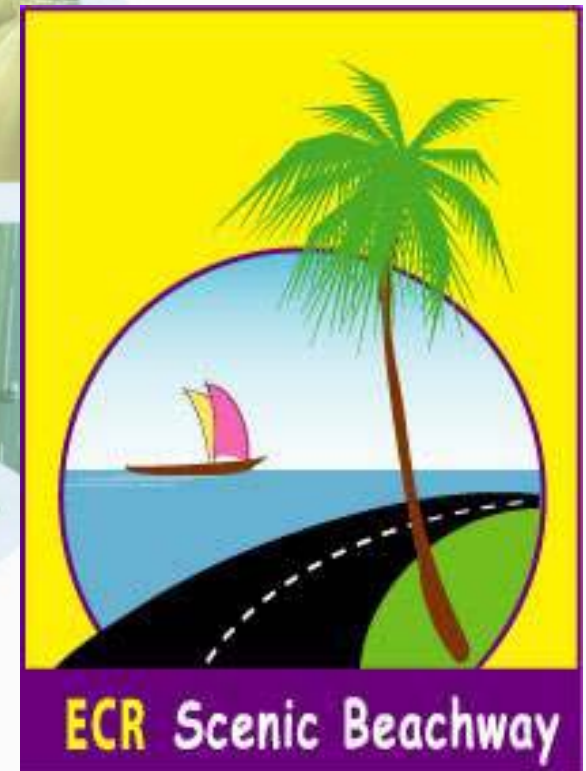
- Investments
  - In commercially viable/marginally viable projects
- Fee Based Activities
  - Managing Partner in commercially infeasible but economically and/or socially desirable projects
  - O&M Partner
  - Advisory Services



# Tamil Nadu Road Development Company Ltd



## East Coast Road Project



# East Coast Road Project



- East Coast Road commissioned in 1998, by improving small roads connecting Chennai with Cuddalore
- Pavement distress observed within two years of commissioning
- Financial constraints hampered maintenance
- Road characterised by high accidents due to poor layout
- Poor levels of signage and absence of road markings



# ECR prior to improvement



# ECR project details



- Widening/improving East Coast Road over 115 km to two lane paved/hard shoulder.
- Cost of project : € 122 million
- Means of financing
  - Equity share capital : € 20 million
  - Sub-ordinate debt : € 20 million
  - Senior debt : € 82 million
- O&M and capital servicing met from tolls
- Integrated improvement-cum-maintenance contract (IIM)



# ECR improved road



Paved Shoulder of 1.75m used by two wheelers and slow moving vehicles  
(Chennai to Mahabalipuram)



Paving block shoulders where widening not possible due to environmental restrictions  
(Mahabalipuram to Palar)

# ECR improved road



- Cats Eyes
- Delineators
- Extensive Signage
- Retro-Reflective Road Markings

# Value added services on ECR



Aesthetic Bus Shelters



24-hour Ambulance Service



Road-the-clock Patrolling



# Advertising potential



- Sponsored advertising at toll plaza and view point
- Telecom service providers advertising at Help-Line Kiosks
- Income from film shoots, corporate sponsorship for toll tickets etc



# Lessons from ECR Project



- Project leverages limited State resources by several times - initial equity of € 10 million by State led to an incremental investment of €122 million
- Government relieved of annual and periodic maintenance
- Project surplus, if any, to be reinvested in road sector in the State
- As TNRDC is 50:50 JV, profits to be shared equally between Government and private sector
- ECR framework highly replicable

# Rajasthan Mega Highways Project



- Upgrading of 1,053 km of key state roads to two lane carriageway with paved shoulder
- Identified roads to complement National Highway stretches and provide better connectivity in north-south direction

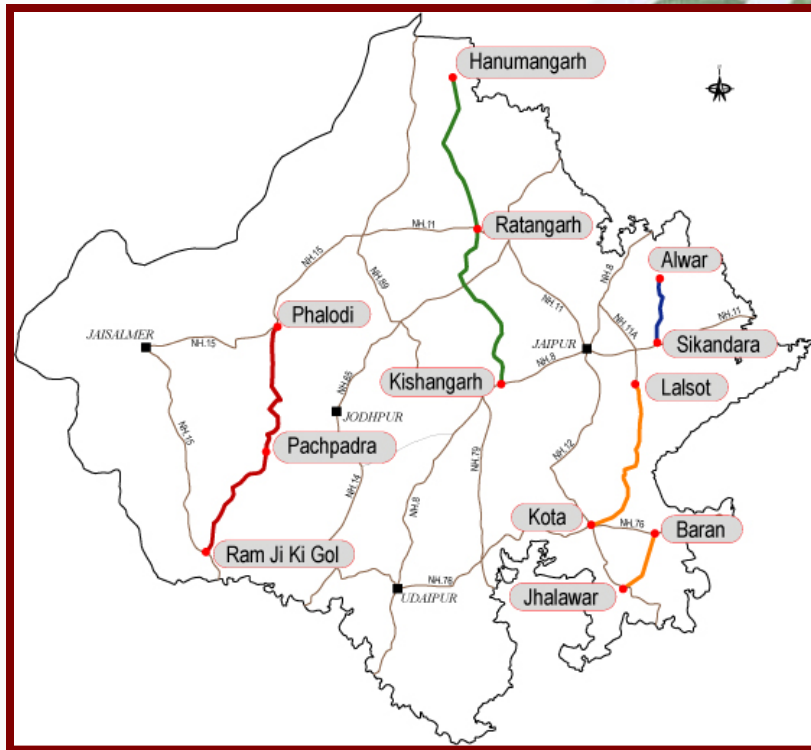


# Project Philosophy

- Single largest road project under PPP framework in India
- Clubbing of different road corridors in a single project enables cross-subsidisation of marginally/un-viable corridors
- Project structure provides focused attention to project development and implementation



# Project Roads



- Project Roads
  - Phalodi to Ramji-Ki-Gol (292 km)
  - Hanumangarh to Kishangarh (407 km)
  - Alwar to Sikandra (81 km)
  - Lalsot to Kota (195 km) and
  - Baran to Jhalawar (78 km)
- Aggregate length : 1,053 km
- Project Period : 32 years
- Implementation Period : Up to 24 months
- O&M Period : 30 years thereafter
- Estimated Project Cost : € 3 billion



# Advantages of TNRDC model



- Unbundling of risks (construction, maintenance, traffic/revenue and financing risks at different stages and appropriate times)
  - With BOT all risks are clubbed -> increase in bid prices
- Returnable up-front capital support
  - In BOT models, up-front capital grant not returnable by operator, even if project does very well
- Project surpluses to be reinvested in Project Roads/State Roads since returns on equity are capped
  - In BOT models, surpluses are retained by BOT operator

# Other advantages to governments



- No government guarantee and hence no burden on government debt
- TNRDC model enables governments to participate in the management of the company
- Government's contribution leveraged many times even in low trafficked state roads for spurring economic development - TNRDC 7.35 times

# Other advantages to governments



- Savings in terms of O&M expenses on PPP roads substantial and can be used on other unviable roads
- Transparent competitive bidding processes to ensure proper price discovery and reasonable toll rates/grants
- Tolling of project roads would help encourage pay-by-use amongst commuters
- Community, educational and tourism development initiatives part of project



# Conclusion

- 50:50 JV arrangement, *à la* TNRDC effective PPP model for road sector development
- TNRDC experience demonstrates scalability and replicability
- Arrangement provides equitable and balanced treatment between Government and private sector



# Agenda

- ✓ Review of international experience
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# Need for good roads



- Without good road infrastructure, investment is discouraged and bottlenecks develop.
- Eliminating burdens boosts economic integration, and creates jobs.



# Need for good roads



- Make movement of goods easier
- Get food to markets and exports to ports
- Create efficient logistics systems





# Urban transport



- > 60% of people live in cities
- Traffic congestion & reduced mobility
- Limited resources for public transport services
- Urban air pollution from transport leads to premature death of over 500 000 people each year





# Rural roads



- **UN Millennium Development Goal**
- Transport critical input for markets, health centres, schools and other social and administrative services



# Silk Road Programme



- 3<sup>rd</sup> IRF International Silk Road Conference





# SE Europe Programme



- 4<sup>th</sup> IRF South East Europe Conference





# Black Sea Ring Programme





# 1<sup>st</sup> Black Sea & 4<sup>th</sup> Silk Road Conference

## Istanbul 14-16 May 2007



Organised by



**International Road Federation**  
**Fédération Routière Internationale**  
**Federación Internacional de Carreteras**



Supported by



# PPP Task Force



- Help governments and decision makers design feasible, profitable projects, “converting dreams to reality”.
- Help to inform politicians and civil servants on issues surrounding PPPs.
- Could develop projects to the point where they can take on a life of their own.

# PPP Task Force



- Develop definitive models and use these to identify viable projects.
- Could also securitise small projects within a country where there are viable projects that are too small to be financed individually.
- A collection of small viable projects would be grouped together into a fund so that bonds can be raised.

# PPP Task Force



- Opportunities exist to support national initiatives in the field of PPP development with the assistance of the World Bank and IFIs.
- IRF is ready and willing to assist the governments and national road administrations with PPP programme.



# Thank you



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