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Item 5 of the provisional agenda

Railway infrastructure financing and Public-Private Partnerships

Railway infrastructure financing and Public-Private Partnerships (PPP)

Note by the secretariat

I. Mandate

1. At its last session, the Working Party on Rail Transport (SC.2) considered railways financing under Private-Public Partnership (PPP) schemes to be an important parameter for railways development and requested the secretariat to prepare a background note on PPP schemes and railways financing which should include the secretariat's proposals for possible further development of these issues for consideration at the next session.
2. The secretariat prepared this background document for consideration and discussion by the Working Party.

II. PPP financing schemes in railways

3. PPP schemes have long been established as efficient tools for governments. At this particular point in time, they also represent a unique investment opportunity. In a period of economic crisis, governments may be reluctant to invest in costly infrastructure projects and may put existing projects on hold. PPP schemes could be the answer to this dilemma. The most important criterion that influences the success of such investment schemes is a clear social and/or economic need for the utility. This need is what justifies the potential profits and therefore the success of the investment.
4. Railway companies have, since their founding, had to deal with both investments and operations. As State companies they operated on a monopolistic basis and were the only clients of their own massive infrastructure investments. This resulted in huge deficits

and organizations without profits. Here it should be added that governments often used railways as “personnel pools”, servicing political interests and further burdening their deficits. Furthermore, the provision by railways of other “social services” such as hospitals, hotels, etc., created massive organizations which, in many cases, lost focus.

5. The workshop on PPP schemes and railway financing, organized by UNECE, in cooperation with the Community of European Railway and Infrastructure Companies (CER) and the International Union of Railways (UIC), on 7 November 2012 in Geneva, showed that PPP schemes in railway projects are not common practice and railways have not benefited enough from these kinds of investments. The reasons for this are many, but the following were highlighted during the workshop.

6. Railway organizations of member States of the European Commission are ahead in the challenge of implementing the directives arising from the four rail packages. Some of these challenges include separating operations from investments, the use of infrastructure by private rail operators and covering high maintenance costs. Even inside the European Commission, cases vary. The Railway organizations of member States from the northern part of Europe deal mainly with improving the quality of their services and expanding their business. There are some cases where railways had used PPP schemes for high speed line investments. Southern European countries suffer from the economic crisis and their main objective for railways is the elimination of deficits. The rail organizations of the eastern part of Europe, with well-established but old network and infrastructure, struggle to survive between the implementation of European Union (EU) directives, the high maintenance costs and the need for modern rolling stock and an organization that generates profits.

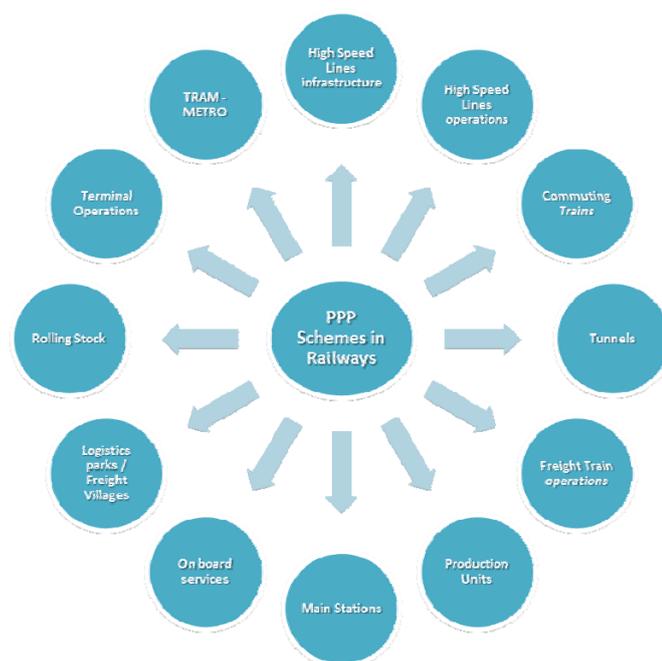
7. Railway organizations of member States in the Caucasus and Central Asia are facing the challenge of restructuring their businesses and becoming profitable. They have retained their monopolistic statuses, operating under their Governments’ umbrellas. However, the need to further develop their services, expand their businesses and become profitable through sustainable development is clear and they remain stable objectives. PPP schemes are not feasible, mainly because Governments have not yet decided to offer part of these State organizations' assets to the private sector.

8. Some unique examples presented during the workshop can be considered as best practice: the investments under PPP schemes in India. Railway organizations could benefit from these case studies, in particular regarding possible areas for PPP schemes implementation.

9. The areas in which railways have already implemented PPP schemes for their investments are varied:

- (a) High speed line infrastructure/operations;
- (b) Commuting trains;
- (c) Freight train operations;
- (d) Production Units;
- (e) Main stations;
- (f) On-board services;
- (g) Logistics parks/freight villages;
- (h) Rolling stock;
- (i) Terminal operations;
- (j) TRAM – METRO;
- (k) Tunnels.

Examples of PPP schemes implementation in Railways



10. It is important to note that even though cases of investments under PPP schemes in railways are few, the ranges of investments are quite many. This justifies behind why railways should urgently explore PPP scheme's potential. In many cases, such as freight villages, main rail stations, production units, etc., railways improve their services, expand their businesses and create extra sources of profits without the risk involved in investment. For instance, in most European capitals the main rail stations are old buildings which also serve as tourist attractions. The renovation of such buildings and their transformation into shopping malls, with catering and hotel facilities costs a lot of money. Railways could transform such "inactive" assets to alternative, direct and indirect, sources of profits. Direct, because tenants occupying space in the station pay rent to the railways. Indirect, because such additional services would make passengers more keen to use railway services.

11. The second, crucial element of a PPP scheme investment is the existence of funds. International financial institutions (IFIs) base their decisions on which projects to fund on specific criteria that railways should know and apply. These are:

- (a) Overly optimistic cost estimation;
- (b) Unforeseen technical problems;
- (c) Overly optimistic timetable;
- (d) Teething problems due to innovative technology;
- (e) Complex projects with large numbers of technical interfaces: track work, electric supply, signalling, telecom, etc.;
- (f) Industry concentration: only a few players;
- (g) Incomplete land acquisition process;
- (h) Overly optimistic demand forecasts;
- (i) Insufficient political support;

- (j) Insufficient public support, including NGOs;
- (k) Open environmental issues;
- (l) Inadequate project preparation:
- (i) Political support for PPP solution;
- (ii) Is PPP the best solution?
- (iii) Inadequate legal framework;
- (m) Capital intensive projects; raising money is challenging and expensive;
- (n) Insufficient revenues (optimistic forecasts) in case of demand risk allocation – is the institutional framework adequate to allocate demand risks?
- (o) SPV shareholder structure:
 - (i) Are the shareholders strategic investors, i.e. rail technology producers, construction companies?
 - (ii) Is the senior lender/underwriter involved in equity?
- (p) Are the risks of such a capital intense project delivering value for money?
- (q) Inadequate risk allocation;
- (r) Is the possibility of financial rebalancing adequate?

12. PPPs are primarily applied in premium parts of the infrastructure, in particular high speed lines, airport links and seaport links, station construction and renovation, and signalling. Also, the majority of rail PPPs are of the DBFM type (Design-Build-Finance-Maintain). This normally means an availability payment model: the State remunerates the Special Purpose Vehicle for making capacity available, with possible further modulation of payments based on additional quality criteria. The infrastructure manager collects the revenue from track access charges as with any other part of its network. In sum, the traffic risk is borne by the State directly, and by the infrastructure manager.

13. A minority of projects are of the BOT type (Build-Operate-Transfer). In that case the traffic risk is borne by the private partner who receives the revenue from track access charges plus (possibly) additional remuneration for meeting additional quality goals, including availability of capacity.

14. France currently leads the way in terms of PPP projects, having initiated several high speed projects and one signalling project in recent years.

Overview of selected rail PPP projects in Europe

<i>Project</i>	<i>Time from design to completion</i>	<i>Contract duration</i>	<i>Route length</i>	<i>CAPEX</i>	<i>Public co-funding (grants)</i>	<i>Type of PPP</i>
Stockholm-Arlanda Airport	1993–1999	41	39	SEK 4.1 bn	SEK 2.4 bn	BOT
HS1 Channel Tunnel rail link	1996–2003 (2007)	90	109	GBP 5.8 bn	GBP 2.01 bn	DBFM
Oresund road-rail link	1991–2000	25–30	38	EUR 2.0 bn	NA	DBFM
HSL-Zuid	2000–2007	25	100	EUR 6.0 bn	EUR 0.11 bn/year	DBFM
Perpignan-Figueras HS	2005–2009	50	45	EUR 1.1 bn	EUR 0.6 bn	BOT
Diabolo rail link Brussels	2007–2012	35	3	EUR 0.54 bn	EUR 0.25 bn	DBF
Liefkenshoek rail link Antwerp	2008–2013	38	16	EUR 0.84 bn	EUR 0.05 bn/year	DBFM
Tours-Bordeaux HS (HSL SEA)	2011–2016	50	340	EUR 7.8 bn	EUR 4.0 bn	BOT
GSM-R France	2010–2015	15	14 000	EUR 1.5 bn	EUR 0.16 bn	DBFM
Lisbon-Madrid HS	2009–2013	40	165	EUR 7.8 bn	NA	DBFM
Nimes-Montpellier HS	2012–2017	25	80	EUR 1.8 bn	NA	DBFM
Montpellier Odysseum Station	2012–2017	30	-	100/120 M€	50 %	DBFM
Bretagne-Pays de la Loire HS	2011–2017	25	214	EUR 3.4 bn	EUR 1.85	DBFM

Source: CER.

III. Next Steps

15. The secretariat after having reviewed the situation on the implementation by railways of PPP schemes in their infrastructure financing and by taking into consideration the importance of the subject for railways development suggest that developments on this subject should be regularly monitored by the Working Party. Main objectives should be the knowledge and good practices sharing and presentation of different case studies in this field.

IV. Guidance by SC.2

16. SC.2 may wish to consider the above proposal and provide guidance to the secretariat on further action in this field.