TCDD Challenges

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Modernizing TCDD

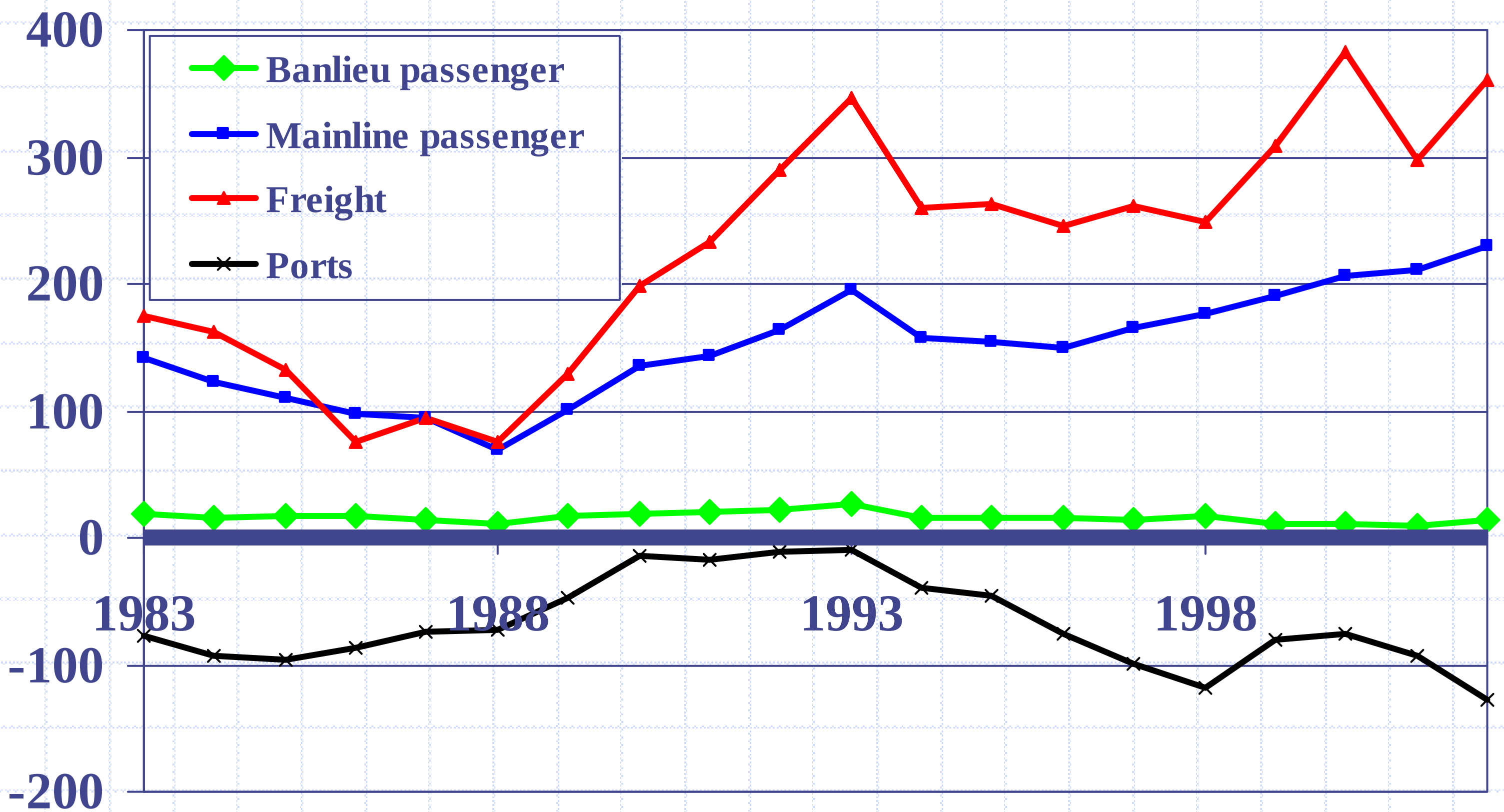
- Status quo not viable for Turkey
- Useful steps are proposed
- Impact of change

Turkey can no longer afford status quo

- Losses are high, and rising
  - On each ton, TCDD receives $7.00, but spends $24.00
  - On each mainline passenger, TCDD receives $2.00, but spends $10.00 (**$6.00** and **$32.00** for Ankara to Istanbul.)
  - Between 1990 and 2001, TCDD losses plus subsidies cost the country $ 7.5 billion
  - Port tariffs are 36 percent above costs: large macroeconomic impact
- TCDD culture: inward focused; production driven; seeks investment, not market, solutions; resists change
- Frequent leadership changes, much political interference
- At 6 percent of freight and 2 percent of passenger markets, TCDD is becoming irrelevant: European Commission found in their White Paper that, at 11 % of freight and 8 % of passenger markets, the European railways were becoming "irrelevant."
- Changes underway (abolishing Regions) will have no effect

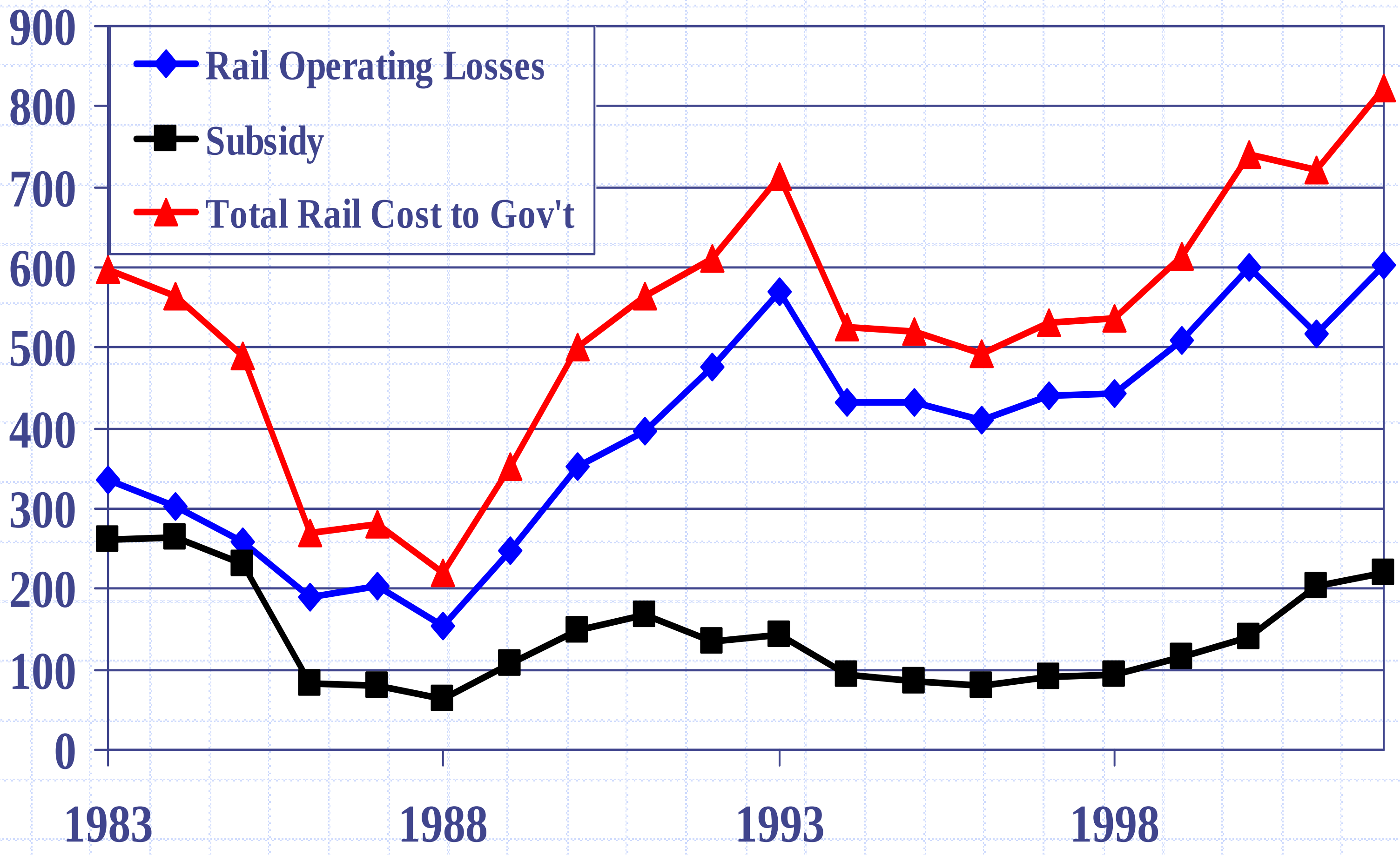
TCDD's losses by operation

(2002 $ Millions)



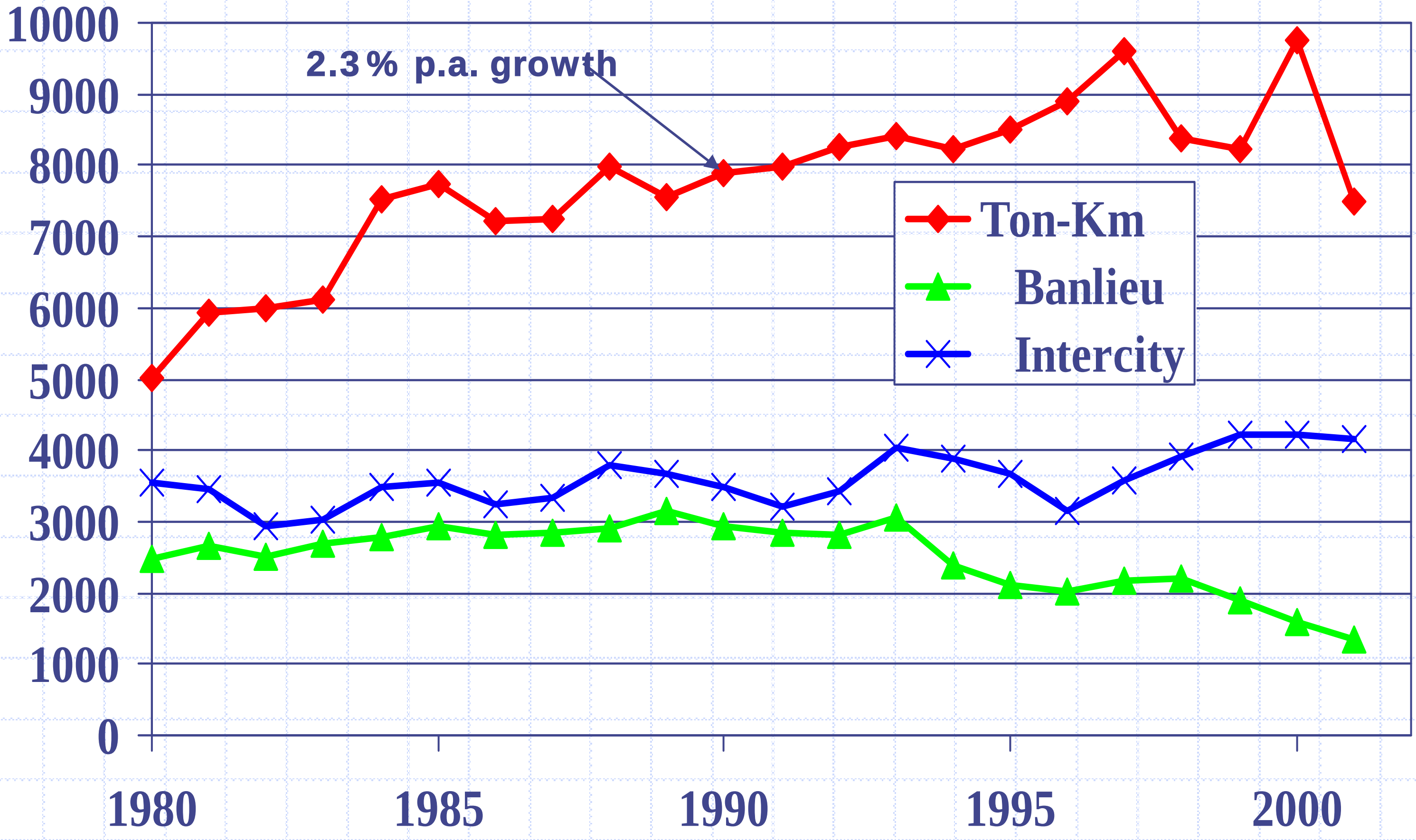
TCDD's rail losses

(2002 US$ Millions)

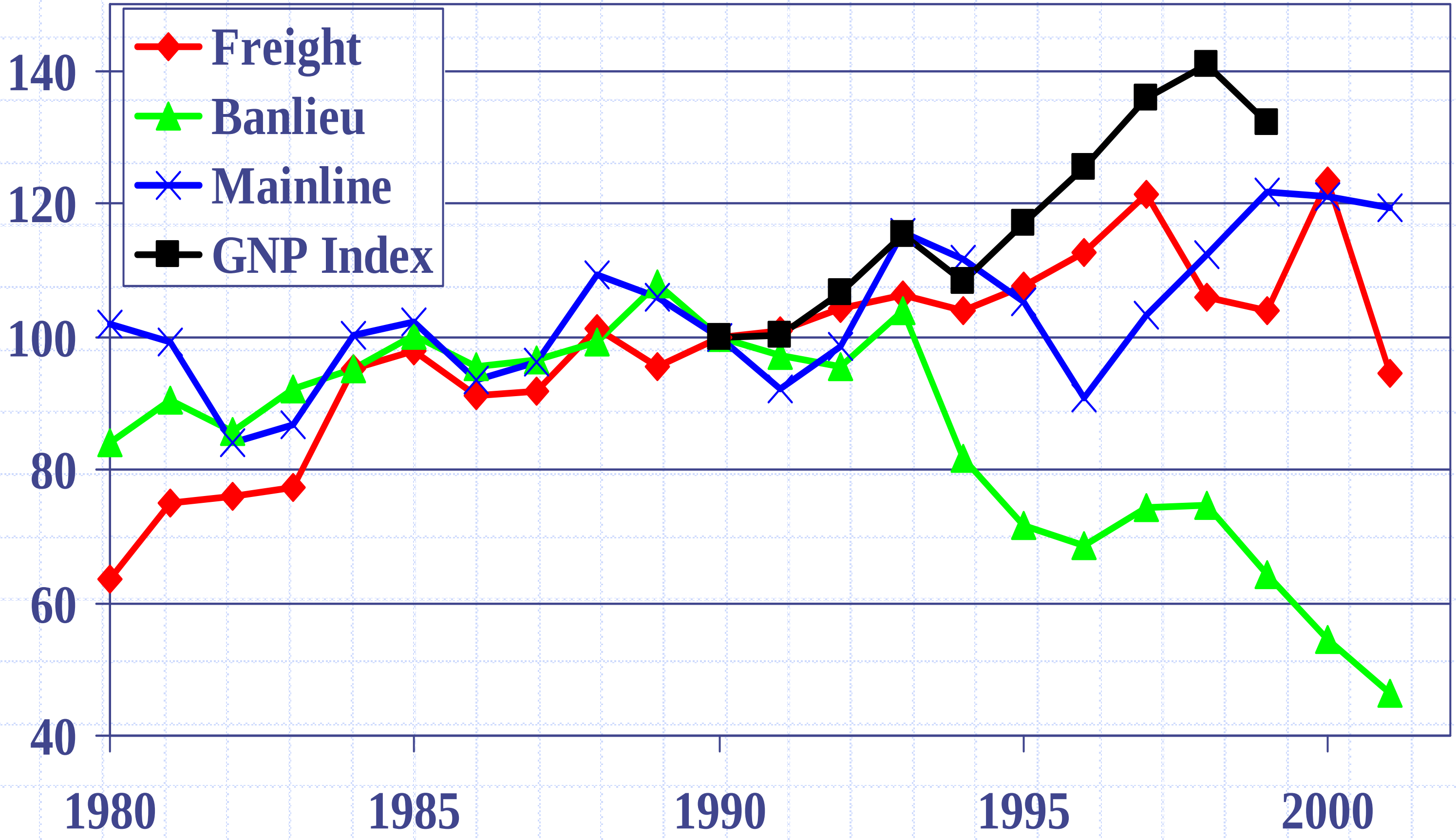


Rail traffic flows (Ton-Km and Pass-Km):

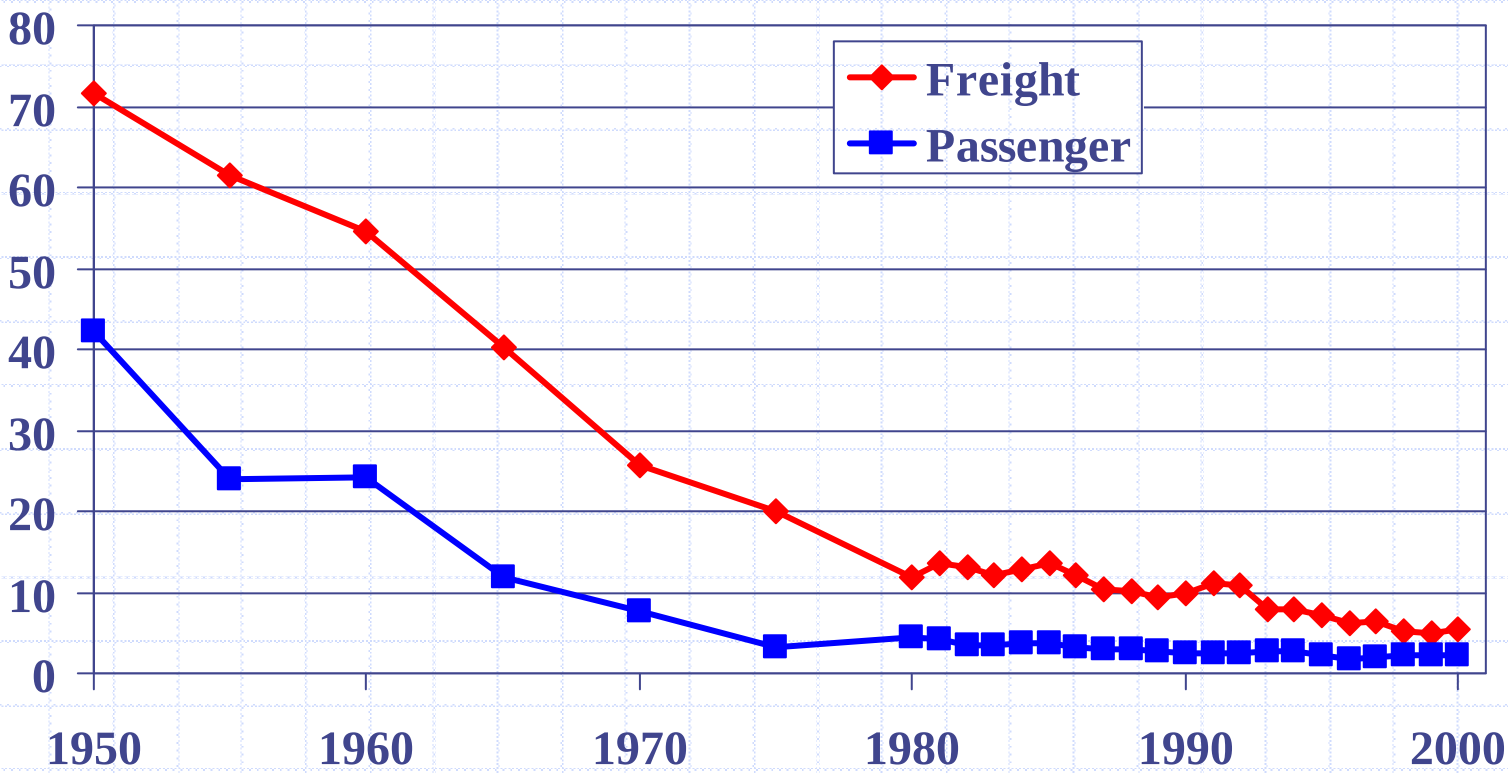
freight sluggish, mainline flat, Banlieu falling



Trends in Ton-Km, Pass-Km and GNP: no market keeping up with GNP



TCDD's shares of the transport market (%)



Useful steps are proposed: the Strategic Plan

- The Strategic Plan: a good vision
  - Shift from inward (production) to outward (market) focus
  - Objective: Commercial, not investment oriented
  - Managements shielded from political pressures
  - Consistent with world (and E.U.) practice
- The Plan:
  - Creates a passenger business. Looks to form partnerships with third parties for Banlieu support
  - Creates a freight business
  - Establishes infrastructure as a service function. Equipment shops also a service function
  - Could eventually spin off factories and non-rail activities
  - Could establish Port activities separately
  - Reduces labor costs by 25 percent of force
  - Improves management information

Implementing the Strategic Plan: the draft Law

- Authorizes appropriate reorganization [9]
- Makes new units “commercial” and enlarges management authority to act: reduces political interference (?) [6]
- Permits dealing with third parties (needs clarification vis a vis local governments) and permits transfer of TCDD services to third parties, but role of private sector not defined [6, 25,28]
- Provides full State subsidy for infrastructure maintenance and capital costs (paid in advance) [35]
- Provides State or third party PSO for uneconomic trains or services and requires payment or termination of service [27]
- Permits third party operators on infrastructure (access terms unclear) [6, 25, 28]

What the law does NOT do

- Civil service controls and mentality remain [20-23]
- Unclear on relations with municipalities [25]
- Privatization remains confused
- Limitations on labor reduction programs [20?]
  - Can jobs be mandatorily reduced? No financing for labor
  - Can good employees be chosen over bad?
- Does not require the separation and/or privatization of non-core functions (future status of Ports, companies not clear) [prov 5]
- While it prevents “monopoly transfer,” it does not ensure the creation of competition, especially in freight, and it leaves TCDD in charge of the creation of competition (if any)
- Cleanse balance sheet [prov 3]

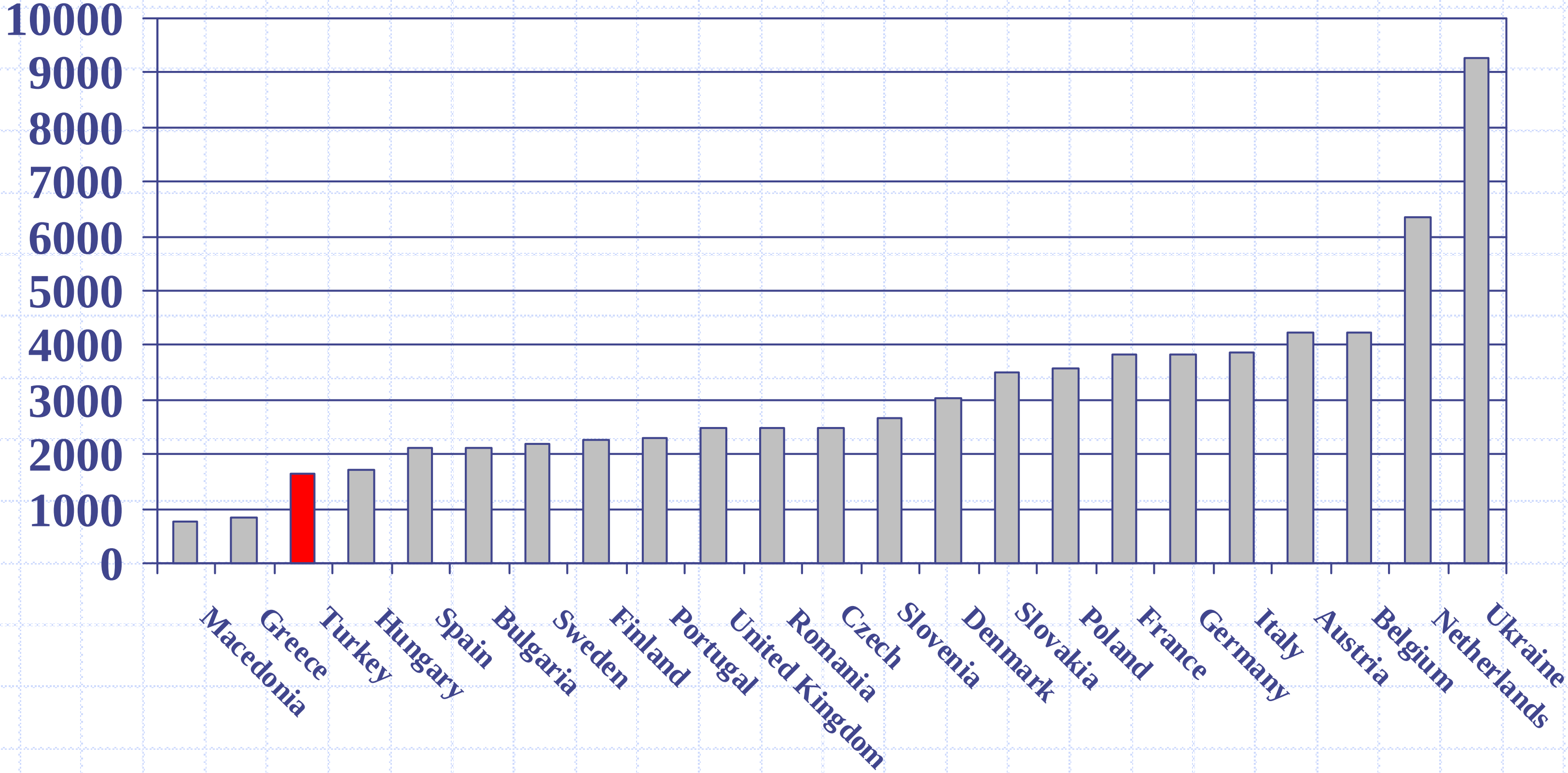
Problems with the law

- Highly one-sided: State has all the responsibilities, TCDD all the freedoms; doesn’t require best practices or outside review
- Requiring State to pay full infrastructure maintenance is questionable: users should pay at least a part of the maintenance costs they impose
- TCDD controls entry of competition – TCDD has no incentive to promote competition. Should protect the entry of third party operators – access should be granted on reasonable terms.
- No safety oversight, and other regulation (of tariffs) is not clear
- No sense of timing or phasing: when will actions occur?
- Privatization or creation of competition should be explicit
- No pressure for efficiency in infrastructure

Making infrastructure work

- TCDD network has very low density compared with other countries and operators: is each link needed for freight, passenger or other (defense, strategic) purpose?
- Network needs updated analysis of the need for, and desired condition of each segment. Maintenance needs cannot be determined in isolation from market use. Government role needed to do financial and economic evaluations.
- Current maintenance efficiency could be improved; mechanize and/or competition for track maintenance. Toshiba locomotives
- Investment focus is questionable; capacity could be improved at much less cost through capacity analysis and modeling. Use capacity analysis on daily basis
- Access charges will be important (depends on Government support for infrastructure maintenance and repair): users should pay variable costs of use
- Independent oversight of infrastructure effectiveness needed

TCDD’s traffic density is low
(000 TU/Km)



TCDD track density compared with private freight operators

	Km of line	Tons (000)	Ton-km (000,000)	Pass. (000)	P-Km (000,000)	Empl	Locos	Wagons		Productivity Indicators: TU/ Employee (000)	Average Lead -- Freight (Km)	TU/Km (000)	T-Km/ Wagon (000)
Primarily Freight Concessions													
Argentina													
Ferroespresso Pampeano	5,094	2,538	877			810	45	1,871		1.08	346	172	469
Nuevo Central Argentino	4,512	5,520	2,490			1,311	92	5,354		1.90	451	552	465
Ferrosur Roca	3,342	3,079	1,263			772	47	4,634		1.64	410	378	273
Buenos Aires al Pacifico	5,252	2,928	2,268			914	110	5,258		2.48	775	432	431
Ferrocarril Mesopotamico -- FMGU	2,739	1,000	495			339	47	2,139		1.46	495	181	231
Bolivia													
Empresa Ferroviaria Oriental	1,244	1,042	626	462	192	461	23	861		1.77	601	658	727
Empresa Ferroviaria Andina	1,499	817	557	192	72	324	30	1,015		1.94	682	420	549
Brazil													
Ferrovia Centro-Atlântica S.A.	7,263	19,608	7,268			2,596	294	8,143		2.80	371	1,001	893
Ferrovia Novoeste S.A.	1,621	2,660	1,588			639	83	2,290		2.49	597	980	693
Companhia Ferroviária do Nordeste	4,381	1,370	709			694	93	1,246		1.02	518	162	569
MRS Logística S.A.	1,675	66,072	26,837			2,988	336	12,346		8.98	406	16,022	2,174
América Latina Logística	6,355	17,510	10,285			2,018	336	9,862		5.10	587	1,618	1,043
Ferrovia Tereza Cristina S.A.	174	3,649	259			142	10	379		1.82	71	1,489	683
Ferrovias Bandeirantes S.A.	4,236	14,947	5,984			3,174	300	11,057		1.89	400	1,413	541
Chile													
FEPASA	2,379	5,066	1,189			521	79	3,400		2.28	235	500	350
Ferronor	2,229	6,300	743			360	24	525		2.06	118	333	1,415
Ferrocarril Arica-La Paz	206	281	59			95	11	300		0.62	210	286	197
Mexico													
TFM	5,176	26,729	17,256			3,694	427	11,898		4.67	646	3,334	1,450
Ferromex	10,724	25,894	20,638	248	80	8,666	494	12,900		2.39	797	1,932	1,600
Sureste	1,479	11,453	4,734			2,097	180	4,180		2.26	413	3,201	1,133
FCCM	1,869	2,069	1,017			352	35	444		2.89	492	544	2,291
Panama	76												
New Zealand -- Tranzrail	3,904	14,699	4,078	11,751	470	4,064	343	5,948		1.12	277	1,165	686
Turkey (system)	8,671	18,530	9,761	85,343	5,832	47,212	552	16,858		0.33	527	1,798	579

TCDD track density compared with private urban passenger operators

		Pass.	P-Km		Productivity Indicators		
	Km of line	(000)	(000,000)	Empl	TU/ Employee (000)	Average Lead -- passenger (Km)	TU/Km (000)
Argentina							
Ferrovias	54	36,553	617	615	1.00	16.9	11,363
Transmet -- San Martin	56	49,592	1,152	656	1.76	23.2	20,571
Transmet -- Belgrano Sur	66	16,343	312	657	0.47	19.1	4,727
Transmet -- Roca	261	155,041	2,472	2,227	1.11	15.9	9,471
TBA -- Mitre	186	81,731	1,456	1,648	0.88	17.8	7,828
TBA -- Sarmiento	184	111,518	2,619	1,398	1.87	23.5	14,234
Metrovias -- Urquiza	32	25,115	434	440	0.99	17.3	13,563
Metrovias -- Subte (Metro)	*47*	*258,825*	*1,124*	*2,056*	*0.55*	*4.3*	*23,915*
Brazil							
Supervia	200	80,500	2,247	2,236	1.00	27.9	11,235
Rio Metro	*35*	*97,479*	*487*	*1,534*	*0.32*	*5.0*	*13,926*
Turkey (Banlieu)	117	70,042	1,425	3,000 *	0.48	20.3	12,181

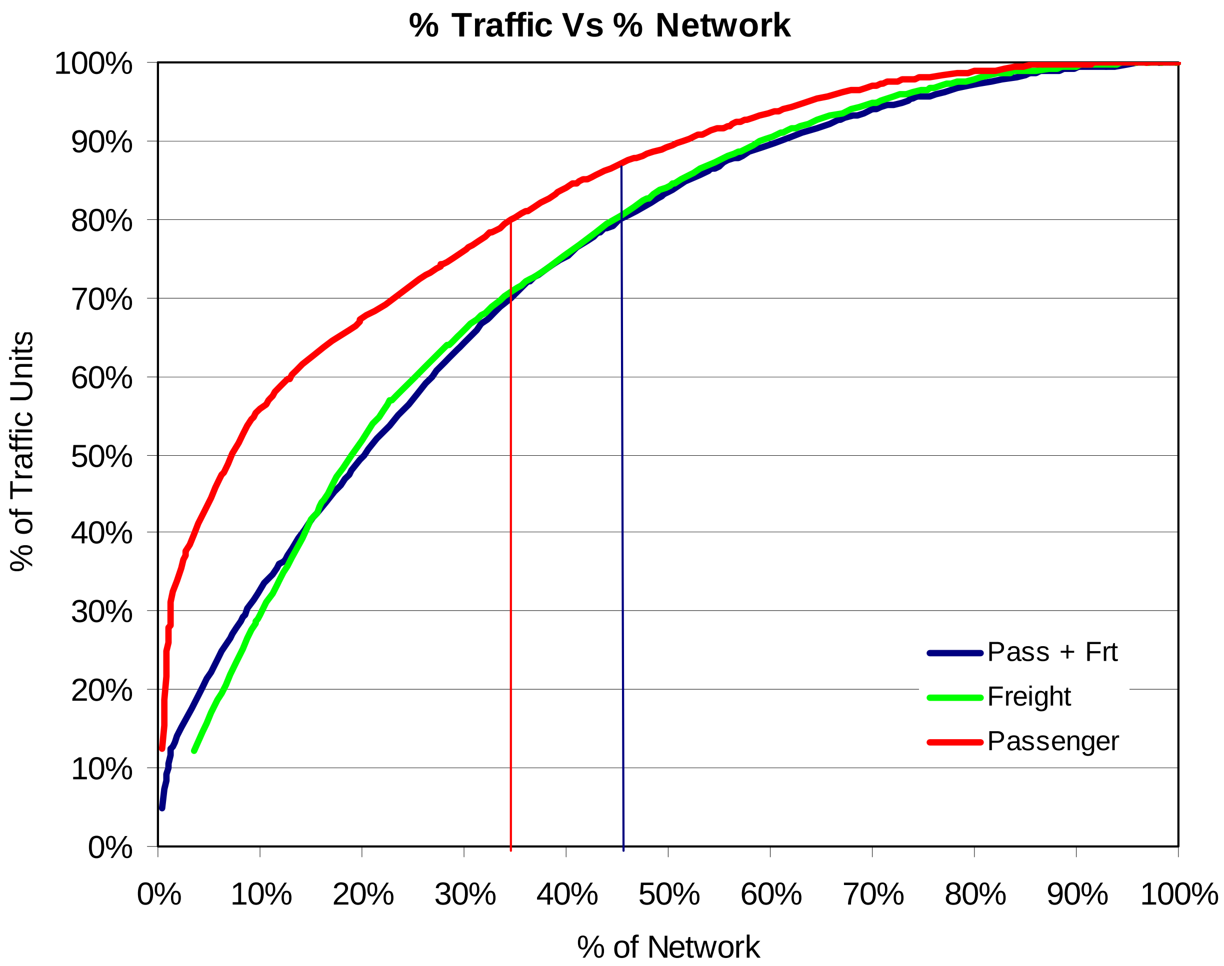
** Banlieu employees estimated*

TCDD has a light density network:
(widest line is 26 million Traffic Units/yr)

Density of freight traffic
(widest line is 4 million net tons/yr)

A core network (52%) carried more than 80 percent of both freight and passenger traffic in 2000

Half the network carries over 80 percent of the traffic

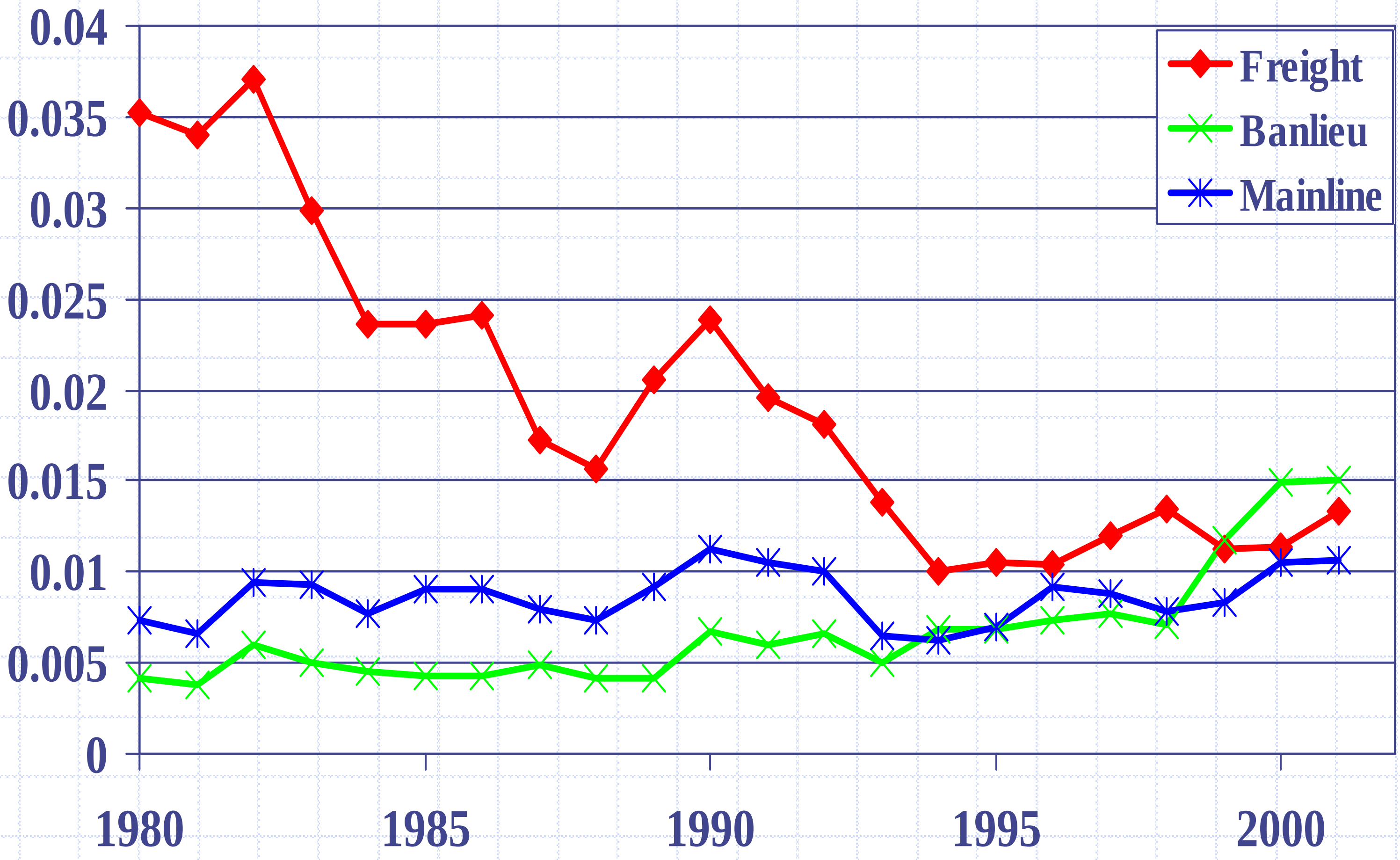


Making the freight business work

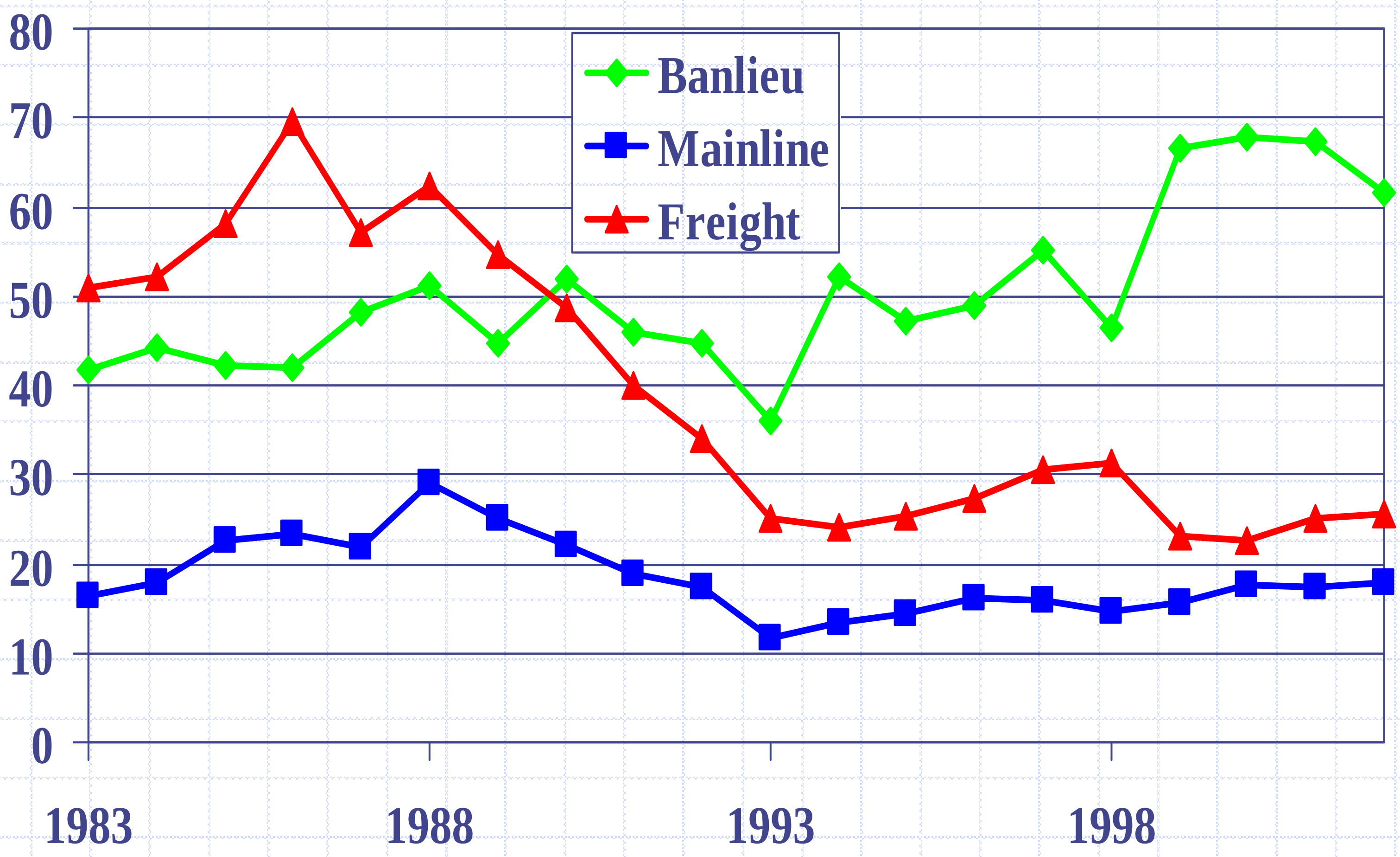
- Freight manager to control ("own") and pay for resources needed to run freight services: locomotives, energy, wagons, shunting, yards and stations needed solely for freight. Should not pay for facilities not used.
- Reduce costs; more block trains, eliminate stations, single driver, lease rolling stock
- Make up for price erosion and raise prices where market permits
- Better knowledge of costs (costing models) and markets
- Eliminate losing services (where tariffs and costs cannot be changed)
- Needs dedicated marketing, billing and pricing system: limited or no regulation of pricing. Contract rates a positive approach.
- Give the manager commercial incentives (bottom line measurement): rising target for cost recovery ratio with eventual full coverage as envisaged in plan
- Privatization should be a future goal

TCDD's freight tariffs in real terms have been falling:

Revenue/ton-km and Revenue/passenger-km in (2002 US $)



Ratio of revenue to expenses (%)
Puzzling trends: what are the objectives?



Making the passenger business work

- Passenger manager controls (“owns”) and pays for all resources needed: locomotives, energy, coaches, shunting, yards and stations needed solely for passenger services. Should not pay for facilities not used.
- Reduce costs; smaller on-train and station crews, more fare gates, eliminate stations, lease better rolling stock
- Raise prices and make pricing more demand-sensitive
- Better knowledge of costs (use costing models)
- Where tariffs and costs cannot be changed, and where subsidy is not adequate, eliminate trains or services
- Needs dedicated marketing, billing, pricing system and improved reservation and ticketing.
- Give the manager commercial incentives (bottom line measurement): rising target for cost recovery ratio with eventual full coverage (after subsidy) as envisaged in plan
- Involve municipalities in suburban planning, investment and subvention payments. Shift to contract relationship as soon as possible.

Making the organization work

- OMIS and improved financial system must be improved to make the system work:
  - Inter-company charging possible – avoid joint use of assets
  - Charges to Government can be supported better
- Business managers need both income statement and balance sheets, at least on pro forma basis: should be responsible for their investment decisions and asset use
- Clearer objectives and less micromanagement of businesses
- TCDD makes commercial decisions: lets Government make social decisions
- Expand (require) use of outsourcing to reduce costs and improve efficiency: no mandates for internal purchasing

Next steps

- Continue efforts at internal reforms: organization change, outsourcing, development of strategies and plans for next phases
- More focused use of investment funds: capacity analysis, match network condition to use needs, reduce service requirements to match condition of assets; more leasing of used equipment; outsource (management contract) Suburban services including equipment
- Fix problems in current organization structures (Installations Department; effects of elimination of Regions)
- Initiate study of line costs and economic value
- Estimate savings to railway and to Government from modernization
- Passage of the law
- Assessment by Government of the need for regulation and oversight of the new railway activities.

Bank conditions

- Modify draft of law
- Present schedule of timing and phasing of changes
- Agreement (TCDD and Government) on system structure, maintenance support, support for uneconomic services and access charges to users
- Pass the law
- Goal: accounting separation at a minimum
- Separate Ports and spin off or privatize non-core rail
- Implement labor reduction