TCDD Challenges

Lou Thompson
Ankara
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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)

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TCDD’s rail losses
(2002 US$ Millions)
Rail traffic flows (Ton-Km and Pass-Km):
freight sluggish, mainline flat, Banlieu falling

2.3% p.a. growth
Trends in Ton-Km, Pass-Km and GNP: no market keeping up with GNP
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TCDD’s shares of the transport market (%)

- Freight
- Passenger
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
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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)

Modernizing TCDD
# TCDD track density compared with private freight operators

<table>
<thead>
<tr>
<th>Country</th>
<th>Tons (000)</th>
<th>Ton-km (000,000)</th>
<th>Pass. (000)</th>
<th>P-Km (000,000)</th>
<th>Empl (000)</th>
<th>Locos</th>
<th>Wagons (000)</th>
<th>TU/Employee (000)</th>
<th>Average Lead - Freight (Km)</th>
<th>TU/Km (000)</th>
<th>T-Km/Wagon (000)</th>
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*Modernizing TCDD*
### TCDD track density compared with private urban passenger operators

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<tr>
<th></th>
<th>Km of line</th>
<th>Pass. (000)</th>
<th>P-Km (000,000)</th>
<th>Empl</th>
<th>TU/Employee (000)</th>
<th>Average Lead -- passenger (Km)</th>
<th>TU/Km (000)</th>
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* 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)

Red lines specifically subsidized in 1976

Modernizing TCDD
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

Modernizing TCDD
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