SCREENING CHAPTER 14
TRANSPORT POLICY

AGENDA ITEM I: LAND TRANSPORT/RAIL/
Market and Infrastructure Access

Country Session: The Republic of TURKEY
25-28 September 2006
Content

- Overview
- Legislation
- Responsible Authorities
- Current Situation of Railways
- Ongoing Studies
- Future Plans
Overview

History of Railways

- **Year 1856**: Construction of the first railway line (Izmir-Aydin)
- **Year 1924**: Railways were nationalised. Directorate General of Anatolian Baghdad Railways (4,000 km)
- **Year 1927**: Ports were connected to railways. General Administration of State Railways and Ports (5,500 km)
- **Year 1950**: The length of railways has reached to 9,204 km
- **Year 1953**: TCDD became a State Economic Enterprise (9,441 km)
Overview (CONT’D)

History of Railways

- Year 1984: TCDD became a State Economic Enterprise (10,263 km)
- Year 2004: Railway length has been increased to 10,948 km.
- Year 2005: Railway Restructuring Studies in accordance with EU legislation has started.
- Year 2006: 150th anniversary of Turkish Railways.
### Overview (CONT’D)

#### Financial Outlook (Million €)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Revenue</th>
<th>Total Expenditure</th>
<th>Balance (Deficit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>1065,35</td>
<td>2086,77</td>
<td>-1021,42</td>
</tr>
<tr>
<td>2002</td>
<td>828,03</td>
<td>1356,34</td>
<td>-528,31</td>
</tr>
<tr>
<td>2003</td>
<td>849,80</td>
<td>1226,72</td>
<td>-376,92</td>
</tr>
<tr>
<td>2004</td>
<td>815,25</td>
<td>1227,81</td>
<td>-412,55</td>
</tr>
<tr>
<td>2005</td>
<td>1183,11</td>
<td>1318,06</td>
<td>-134,95</td>
</tr>
</tbody>
</table>

Source: TCDD
Overview (CONT’D)

Rail Network

- Main Lines 8.697 Km
- Secondary Lines 2.287 Km
- TOTAL 10.984 Km

- Electrification 2.336 Km (21%)
- Signalling 3.111 Km (28%)
- Double Track Main Lines 406 Km (5%)
- Triple Track Main Lines 36 Km (0.3%)

- Single Track Train Operation on 95% of the network.
Overview (CONT’D)

Rolling Stock

- 461 diesel mainline locomotives
- 71 electric mainline locomotives
- 68 shunting locomotives
- 49 diesel multiple units
- 87 electric multiple units (commuter transport)
- 996 passenger cars
- 16.102 freight wagons
Overview (CONT’D)

Investments

<table>
<thead>
<tr>
<th>Years</th>
<th>Allocation (million €)</th>
<th>Expenditure (million €)</th>
<th>Realisation Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>162</td>
<td>77,76</td>
<td>48</td>
</tr>
<tr>
<td>2003</td>
<td>148,8</td>
<td>114,58</td>
<td>77</td>
</tr>
<tr>
<td>2004</td>
<td>400,7</td>
<td>216,43</td>
<td>54</td>
</tr>
<tr>
<td>2005</td>
<td>517,5</td>
<td>258,76</td>
<td>50</td>
</tr>
<tr>
<td>2006</td>
<td>693,9</td>
<td>208,1*</td>
<td>30*</td>
</tr>
</tbody>
</table>

Source: TCDD

* January-August
Overview (CONT’D)

Employment - TCDD

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>65,874</td>
</tr>
<tr>
<td>1980</td>
<td>62,867</td>
</tr>
<tr>
<td>1990</td>
<td>57,252</td>
</tr>
<tr>
<td>2000</td>
<td>47,212</td>
</tr>
<tr>
<td>2006</td>
<td>36,689</td>
</tr>
</tbody>
</table>
Overview (CONT’D)

Production – TCDD (2005)

- Shares of goods and passenger transport by rail are 5.7% and 2.2% respectively.

- Approximately 30% of total port handling is realised at TCDD ports.
## Overview (CONT’D)

### Services – TCDD

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006 (Est.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger Transport (Million Persons)</td>
<td>52</td>
<td>48</td>
<td>50</td>
<td>51</td>
<td>52</td>
<td>60</td>
</tr>
<tr>
<td>Passenger Transport Revenue (Million €)</td>
<td>58</td>
<td>56</td>
<td>62</td>
<td>62</td>
<td>77</td>
<td>104</td>
</tr>
<tr>
<td>Freight Transport (Million Tons)</td>
<td>14,6</td>
<td>14,6</td>
<td>15,9</td>
<td>17,9</td>
<td>19,2</td>
<td>20,4</td>
</tr>
<tr>
<td>Freight Transport Revenue (Million €)</td>
<td>89</td>
<td>105</td>
<td>125</td>
<td>146</td>
<td>173</td>
<td>208</td>
</tr>
<tr>
<td>Port Handling (Million Tons)</td>
<td>34,6</td>
<td>36,3</td>
<td>41,5</td>
<td>46,7</td>
<td>44,6</td>
<td>50</td>
</tr>
<tr>
<td>Port Handling Revenue (Million €)</td>
<td>179</td>
<td>186</td>
<td>195</td>
<td>195</td>
<td>212</td>
<td>242</td>
</tr>
</tbody>
</table>

Source: TCDD
### Overview (CONT’D)

Permanent Way - Characteristics of the Existing Network;

- **Curve radius**: 30% out-of-standard (< 1000 m.)
- **Gradient**: 25% out-of-standard (> 0.1)
- **Axle load**: 2.4% out-of-standard (< 20 tons)
- **Sleeper type**: 38% out-of-standard (wooden, steel)
- **Rail age**: 34% out-of-standard (> 25 years)
Legislation

- Law on the Organisation and Duties of the Ministry of Transport No 3348
  (Official Gazette: 17 April 1987, no 19434)
  - regulates the tasks and duties of MoT (DLH and DGLT)

- Decree Law on State Economic Enterprises (SEEs) No 233
  (Official Gazette: 18 June 1984, no 18435)
  - defines the legal status of SEEs

- TCDD’s Incorporation Statute on TCDD’s Rights and Obligations
  (Official Gazette: 28 October 1984, no 18559).
  - defines responsibilities and competences of TCDD
Responsible Authorities

- The Ministry of Transport (MoT)
  - DG Construction of Railways, Ports, Airports (DLH)
  - DG Land Transport (DGLT)
- Turkish State Railways (TCDD)
Responsible Authorities (CONT’D)

- MoT:
  - determines and plans rail transport demands and needs
  - defines the basic principles and policies regarding the arrangement of rail transport systems
  - regulates relations with the related international railway organisations
Responsible Authorities (CONT’D)

- DLH is responsible for:
  - construction of new railway lines
  - preparation of the plans and programs of the railways and the facilities and equipments regarding these
Responsible Authorities (CONT’D)

DGLT is responsible for:

- ensuring that railway transport is carried out in accordance with the national security, economic, technical, social needs and aims
- promoting rail transport in harmony with other modes
- co-ordinating all international activities in the field of railways
Responsible Authorities (CONT’D)

TCDD:

- Operates and renews railways, ports and piers
- Guides and coordinates affiliated companies
- Carries out all kinds of complementary activities regarding rail transport: maritime, land transport including ferry operations
Responsible Authorities (CONT’D)

TCDD:

- Manufactures rolling-stock and similar vehicles, sets up warehouses, depots, passenger facilities
- Undertakes railway construction works as a contractor in Turkey and abroad
Current Situation of Railways

TCDD

- is affiliated to the MoT.

- is a State Economic Enterprise,
  - whole capital is paid by the State.

- benefits from monopoly rights concerning the operation of railway services in Turkey.
Current Situation of Railways (CONT’D)

5 main units in the headquarter:

- Installations Department
  (electrification, signalling, telecommunication, traffic)
- Permanent Way Department
- Freight Transport Department
- Passenger Transport Department
- Rolling Stock Department.
Current Situation of Railways (CONT’D)

- 7 Regional Directorates
  - Istanbul, Ankara, Izmir, Sivas, Malatya, Adana, Afyon

- 3 affiliated companies:
  - TULOMSAS: Locomotive, Motor and Freight Wagons
  - TUVASAS: Passenger Cars
  - TUDEMSAS: Railway Machines and Freight Wagons

- 4 factories active in railway industry
  - a switch factory, two concrete sleeper factories and a rail-welding factory
### Current Situation of Railways (CONT’D)

**Employees at TCDD in 2006:**

<table>
<thead>
<tr>
<th>Related Departments</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure, traffic management and rolling stocks</td>
<td>20.327</td>
<td>55</td>
</tr>
<tr>
<td>Train operations</td>
<td>5.262</td>
<td>14</td>
</tr>
<tr>
<td>Affiliated companies, e.g. manufacturing locomotives, freight and passenger wagons</td>
<td>4.951</td>
<td>14</td>
</tr>
<tr>
<td>Ports</td>
<td>4.722</td>
<td>13</td>
</tr>
<tr>
<td>Plants for switches, sleepers and rail welding</td>
<td>1.427</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>36.689</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
Current Situation of Railways (CONT’D)

Main conventions and organisations to which TCDD is a party:

<table>
<thead>
<tr>
<th>COTIF</th>
<th>CIV</th>
<th>CIM</th>
<th>CIT</th>
<th>ICF</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUROFIMA</td>
<td>OTIF</td>
<td>RIC</td>
<td>RIV</td>
<td>UIC</td>
</tr>
</tbody>
</table>
Current Situation of Railways (CONT’D)

➢ TCDD receives four types of subsidies;
   - for track maintenance and repair from MoT
   - for some uneconomic lines from the Undersecretariat of Treasury (UT)
   - for some express trains from the UT
   - for ferry traffic on Van Lake from the UT
Ongoing Studies

Why a Reform?

TCDD:

- Does not operate on fully commercial principles
- Has a monopoly on management of the infrastructure and on provisions of rail transport services
- Does not have separation of infrastructure management and provision of transport services
- Does not have separation of accounts
Ongoing Studies (CONT’D)

- Does not have a well effective cost accounting system to calculate unit costs related to infrastructure.

- Does not have a charging system and a performance scheme as:
  - the rail sector is not open to other railway undertakings
  - an independent infrastructure manager is not set up yet

In addition:

- No Independent Regulatory Body
- No Network Statement
Ongoing Studies (CONT’D)

“Turkish Rail Sector Re-structuring and Strengthening” Project, financed from EU funds, aims:

- Re-structuring of railway sector
- Re-structuring of TCDD
Ongoing Studies (CONT’D)

Within the framework of Twinning Project;

Technical studies on:

- drafting of General Railway Framework Law
- drafting of TCDD Law
- drafting of By-Laws on “Interoperability”, “Safety”, “Licensing” and “Access to Railway Infrastructure”
- identification of necessary bodies are underway.
Ongoing Studies (CONT’D)

Within the framework of service component of the Project:


- A business unit and sub-sector based new TCDD
- Financial Management Information System (FMIS):
  - to measure financial performance (profit and loss)
  - to monitor actual performance
- Improvement of skills and knowledge of managers
- Public Service Contracts (PSCs) between Government and TCDD
- Separate accounting for infrastructure, operations and Public Service Obligations (PSOs)
Ongoing Studies (CONT’D)

Expected Outcomes of the Project

- Re-organisation for separation of the management of infrastructure from railway transport services.
- Separation of accounting for infrastructure, transport services (passenger & goods) and PSO.
- Free and non-discriminatory access to the railway network.
- Independent allocation of the capacity and charging.
Ongoing Studies (CONT’D)

Expected Outcomes of the Project

- Fully commercial operation of transport activities at New TCDD.

- Provision of long term financial viability of the Infrastructure Manager (IM).

- Preparation of the network statement under responsibility of IM.