Case Study

Moroccan Railways

1 Situation Before Reform

The Moroccan railway network was built in the 1920s and operated by three private foreign-owned concession companies. In 1963, the Government of Morocco created the *Office National des Chemins de Fer* (ONCF), a public corporation (*Etablissement public industriel et commercial or* EPIC) under the Minister of Transport, which took over management of the existing network and railway services operation. The ONCF is administered by a Board of Directors, chaired by the Minister, comprises eight representatives from various ministries, and has a General Manager appointed by *Dahir* (Royal Decree). During ONCF's first 25 year, ONCF, headed by the same General Manager, extended the network to better serve the phosphate mining industry, modernized infrastructure (high-volume traffic routes were electrified), and introduced high-quality passenger services on selected routes. As a result, traffic increased significantly: during 1963-78, phosphate traffic rose by 10 million tons and during 1980-88, passenger traffic more than doubled.

1.1 Economic Model Running Out of Steam

In the mid-1980s, the 1,900 km railway network was considered adequate; it served most of Morocco's major towns, ports, industrial and mining areas. The ONCF was active in three transport market segments: (a) the monopoly on phosphate rock transport from mines to ports; (b) general freight transport where stiff competition existed with the trucking industry; and (c) intercity passenger transport with significant market share on the few routes it served. Traffic density was high at 3.4 million traffic units per route-km. Most infrastructure was in good condition but close to capacity on some routes. Some rolling stock and locomotive power was nearing the end of its useful life but availability was satisfactory; 80 percent of rolling stock was more than 20 years old. Locomotive, freight wagon, and passenger coach productivity in ONCF was equal to or better than Western European railways, especially staff productivity (in 1988, ~570,000 traffic units per employee). In ONCF, managers and staff were technically competent and the working atmosphere was generally good.

Despite these favorable aspects, by the end of the 1980s, the railway economic model was declining in relevance. Beginning in 1980, ONCF's financial situation was seriously deteriorating and by 1986, the deficit had reached 30 percent of traffic revenues. Balancing ONCF's books depended increasingly on substantial funding transfers from Government, which was having its own fiscal problems. The transfers were not only unsustainable but also not fully transparent. Moreover, competition was increasing from the deregulated road sector and ONCF competitiveness was seriously hampered by a 'technically oriented' internal organization and by cumbersome bureaucratic management procedures. Government had to approve tariffs, a State financial controller had prior review of expenses, and public procurement procedures were mandatory. In 1988, ONCF suffered a serious financial crisis that threatened its technical performance.

In 1994, as the financial crisis deepened, Government appointed a new ONCF general manager who enjoyed full Government support at the highest level. The formerly private-sector manager was granted a general mandate to 'fix' the railway. He assembled a new management team, promoted well-trained younger managers who were ready and willing to participate in railway sector turnaround, and established salary levels comparable to the private sector.

2 Reform Goals

2.1 Pragmatic and Progressive Approach

The restructuring program objective was to adapt railways to a more competitive transport sector, improve competitiveness and financial performance, and reduce Government financial transfers. The core restructuring program was implemented during 1994-02, and subsequently refined. The program transformed how railway activities were managed and ONCF's relationship with customers, Government, and company managers. The new ONCF management team dominated the design and implementation of the restructuring program, which was pragmatic and progressive, and tapped technical support from local and international consultants and international financial institutions, including the World Bank.

The team built consensus among primary stakeholders, including Government and ONCF staff, on the main reform components. The Directorate for public enterprises in the Ministry of Finance played a critical role in financial restructuring, a key element of the program. The medium-term restructuring program did not aim to transfer core railway activities to the private sector, which was considered premature and unviable—economically and politically. However, private sector involvement in support activities was considered favorably. Also, infrastructure separation was ruled out since the railway was too small for competition between operators, the primary benefit of creating separate legal entities for railway infrastructure management and rail services operation. The main components of the restructuring program are presented below.

3 Reform

3.1 Adapting to a More Competitive Transport Market

Freeing ONCF to determine service configuration and tariffs

In the general context of transport market deregulation already underway in road transport, the Government relinquished control to ONCF management, which reacted rapidly to rationalize passenger rail services by cancelling low-quality, low-use services. This reduced overall passenger services by about 25 percent, and passenger train stops by about 30 percent for a total loss in revenue of only 1.0 percent.

For retained passenger services, average fares were increased by 7.0 percent in 1994, and simultaneously ONCF introduced market-based fares and new passenger services (see below). For freight traffic, ONCF progressively replaced official tariffs with 'contract rates' to its main customers.

Adjusting phosphate rates

In 1994, rates for phosphate rock transport were adjusted. Phosphate rock transport carried out for the State-owned *Office chérifien des phosphates* (OCP) accounted for about half of total railway activity and rates had always been low to support the phosphate industry. Initially, the OCP refused any increase in ONCF-proposed base rate for phosphate transport but an independent audit of operations and operating costs convinced Government to approve a substantial increase.

Improving rail services quality

Improving customer services was a restructuring program priority. Phosphate transport and general freight services were good, so initially most improvements focused on passenger services. A new commercial strategy introduced 'shuttle' services on main routes, and the strategy was refined during restructuring. This influenced the investment program, which was developed and implemented during the restructuring period and beyond.

3.2 Slashing Operating Costs

The restructuring program pursued a rapid substantial reduction of operating costs. In 1995, thanks to a strict short-term ONCF management action program, operating costs were reduced by 20 percent over those of 1994. Improved control of staff costs was key and in 1994, the railways abolished recourse to temporary labor (about 5,000 staff), plus some managers' benefits. Also, the restructuring program introduced strict control of overtime and staff travel expenses; retired staff were no longer replaced. Other cost control measures included rationalizing spare parts management and reviewing maintenance procedures. Rationalizing passenger services also reduced operating costs.

3.3 Introducing a New Personnel Policy and Pension System

Reforming personnel policy

A long-term personnel policy was introduced that included: (a) new job descriptions for all positions to increase staff polyvalency; (b) new medium-term target staffing levels; and (c) new staff rules and regulations, based on private sector models, adopted through negotiation with unions. These changes were implemented without social unrest except for a brief employee strike in 1994. By 2002, staffing levels had plummeted to just under 10,000 from 14,367 in 1994, not including 5,000 'temporary' staff. By 2004, this number had dropped to 9,347. The ratio of staff costs to traffic revenue—a major determinant of railways' financial profitability—was 48 percent in 1994, 34 percent in 2002, and 30 percent in 2004. By 2004, staff productivity had risen from 450,000 traffic units/ employee to 875,000.

Transferring the pension system to RCAR

In January 2002, ONCF transferred the pension system to RCAR—a major step in restructuring. Prior to the onset of restructuring, ONCF managed an internal pension fund for retired permanent staff that was based on civil servant pension system rules. However, the staff demographic ratio was deteriorating and pension payments to retirees were rising, producing a mismatch of legally mandated ONCF pension contribution amounts. In 1994, the ONCF subsidy to fill this gap reached 21 percent of the ONCF wage bill and projections indicated the subsidy would rise to about 60 percent of the wage bill in 2007, and 90 percent by 2015. Clearly, the existing pension system was unsustainable and would jeopardize ONCF's financial position in the medium-term. The ONCF negotiated with an external pension fund, *Régime Collectif d'Allocation des Retraites* (RCAR), which assumed pension services for existing and future retirees. ONCF and RCAR agreed on a payment to RCAR of DH 5,868 million (equivalent to ~US$ 300 million). The ONCF mobilized DH 4,923 million in financing under favorable conditions on the Moroccan bond market; and DH 945 million in medium-term loans from Moroccan banks. Previously, Government accepted that, as a component of the ONCF financial restructuring package mentioned below, it would 'reimburse' ONCF for the cost of pension system transfers through annual equity participation in ONCF to be subscribed by the Government over a period of 15 years. Transfer of the pension system to RCAR—a major step in the restructuring program became effective on January 1, 2002.

3.4 ONCF Financial Restructuring

The ONCF financial restructuring was a crucial component of the restructuring program that ONCF management negotiated with the Directorate in charge of public enterprises in the Ministry of Finance. Agreements were formalized in two *Contrats-programmes* (CP) between Government and ONCF in 1994 (CP for 1994-98) and in 1998 (CP for 1998-02).[293] The CP defines primary policy elements and financial objectives for ONCF to implement during the period, and specifies Government commitments for financial support to ONCF by the Treasury. The main features included in the CPs for ONCF financial restructuring included:

- in 1994, Government provided an exceptional contribution to the 'rehabilitation' of ONCF balance sheet to compensate for the 'sins of the past' and allow ONCF to resume its operations on a sound financial footing; this contribution (DH 10,920 million, equivalent to ~ US$ 1,200 million) was provided, notably through conversion into equity of a substantial part of the debt previously contracted by ONCF.

- The Government reimbursed ONCF through subscription to ONCF equity over a 15-year period for the cost borne by ONCF to transfer the pension system to RCAR; (c) the Government did not pay operating subsidies to ONCF, except for explicit requests for ONCF to operate a service under a Public Service Obligation scheme (which never occurred during the period).

[293] ONCF further signed CPs in 2002 for the 2002-2005 period and in 2005 for the 2005-2009 period.

- ONCF implemented the investment program described in the CP; the program included principally infrastructure renewal and upgrade on the existing network and rehabilitation and acquisition of rolling stock.

- An investment program financing during the 1995-02 was mobilized through ONCF internal cash generation and loans subscribed directly by ONCF and through an increase in ONCF equity to be subscribed by Government for DH 700 million (~ US$ 80 million).

Remarkably, Government and ONCF honored the CP provisions.

3.5 ONCF Corporate Reorganization

In 1994, ONCF was organized along traditional lines that were common in European railways at that time—technical functions took precedence—infrastructure, operations, including train movements, rolling stock and locomotive power, including train driving. The operations department handled marketing and commercial functions but these were given little importance. During the first phase of restructuring, ONCF management chose to retain this organization in principle, with a streamlined simplified chain of command well-adapted to implementing the first priority—rapidly cutting operating costs. A major change was that the finance department became a key player in the decision-making process, no longer merely a 'cashier.'

After a few years, it was clear that the traditional organization was unsuitable for commercial management of the railway. Instead, the ONCF management organized by internal business units, using principles that had been successful elsewhere, notably in North American railways. After adopting the new organizational architecture, unit managers were designated in advance. Working groups benefitted from the support of a high-level consultancy firm that designed the new organization in detail, including preparing new job descriptions, defining new procedures, and selecting staff. This process, which took more than one year, was an investment in developing full ownership of the new organization by managers and staff.

The development process facilitated a paradigm shift—the old organization ceded to the new organization on July 1, 2002, without disturbing railway functioning. Very little organizational fine-tuning was necessary in the following months. The new corporate organization has two main components: (a) four business units—infrastructure, including train movement control, phosphate transport, freight transport, and passenger transport; and (b) a general management unit, including functional and support departments, including finance, personnel, strategy, information systems, etc. Transport units are managed as autonomous entities, responsible for commercial relations with customers, full control of staff, rolling stock and locomotive power operations and maintenance. The new organization was instrumental in improving customer relations, encouraging innovations in service design and quality, and developing traffic volume and profitability.[294]

[294] Changes were introduced in the organization in 2009 to adapt ONCF to the new challenges it is facing. A new business unit has been created for Infrastructure Development (in charge notably of construction of a High Speed Passenger line). Rolling Stock Maintenance has also been concentrated in a separate business unit, with a perspective of facilitating in the future a possible partnership with the private sector in this field.

3.6 New Legal Framework for Railway Activity

Opening to competition

In parallel with implementing ONCF restructuring, work began on a new legal framework for railway activity. The legal underpinning of the sector dated to the creation of ONCF in 1963, when railway activities were considered 'public service' rather than 'commercial'. Preparing a new legal framework required discussions among ministries and the ONCF, and a lengthy parliamentary procedure. Eventually, on January 20, 2005, a new law was adopted and promulgated. The law opens railway activities to competition and allows railway enterprises to be created distinct from ONCF.

The law is flexible, allows separation of infrastructure from operations and vertical integration of railway activities. According to legal provisions, railway enterprises comprise 'rail infrastructure management enterprises' in charge of maintenance and operation of rail infrastructure, and 'railway services operators' in charge of technical and commercial operations of railway services. Legally, rail infrastructure management enterprises operate under concessions signed by Government; railway services operate under licenses granted by Government. Also, a railway enterprise may merge the role of a rail infrastructure management enterprise and a railway services operator; in which case its legal basis is a concession regime. The law distinguishes between 'commercial' railway services and public service obligations resulting from a formal Government request. To date, no railway enterprise distinct from ONCF has been created.

Creating a joint-stock company to replace ONCF will abolish ONCF as an *Etablissement public industriel et commercial* (EPIC) and rail infrastructure management and railway services operations on the existing network will be granted under a concession agreement to a fully State-owned joint stock company, the *Société marocaine des chemins de fer* (SMCF). The new joint-stock company will have autonomy to manage the railway enterprise, facilitate private-sector partnerships, and reinforce an 'arm's-length' relationship between Government and railways. Under law, ONCF will become SMCF when Government signs the concession agreement, which has yet to happen. When the law to transform ONCF into SMCF was adopted, it was discovered that under existing financial regulations, ONCF would owe some DH 14,000 million in taxes (~US$ 1,600 million) to the Treasury, which is infeasible. Therefore, Parliament is reviewing a draft bill to amend the January 20, 2005 law, which would remove the financial impediment to creating SMCF; adoption of the law is expected soon.

4 Results

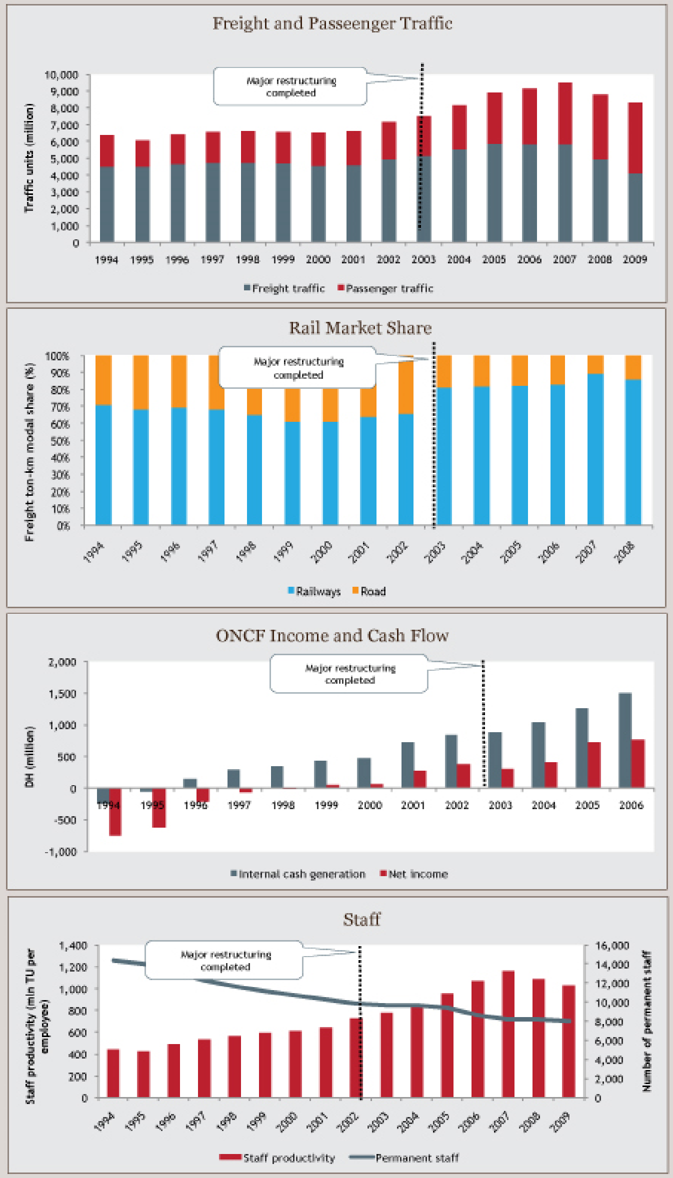
The Moroccan railways restructuring process is a great success, despite the delay in creating the joint stock company to manage and operate the railway network. Restructuring publicly owned railways without an upfront legal and institutional shakeup is rare. By 2004, Morocco had transformed ONCF into a truly commercial, financially sound, business-oriented enterprise. Compared to 1994, traffic volume increase was noticeable, railway modal share had increased compared to freight carried by road, and staff productivity had almost doubled (Figures 1 and 2).

Figure 1 ONCF Operational and Financial Indicators 1994-2006

	1994	2004	2006
Freight traffic (000,000 tkm)	4555	5535	5827
Passenger traffic (000,000 vkm)	1922	2645	3333
Total traffic (000,000 tu)	6477	8180	9160
Traffic density (000 tu per route-km)	3395	4304	4803
Permanent staff	14367	9347	8625
Staff productivity (000 tu per employee)	451	875	1062
Ratio of staff costs to traffic revenue (%)	48	30	27
Internal cash generation (DH million)	234	1043	1506
Net income (DH million)	744	411	762

Financial recovery was spectacular, primarily achieved by generating substantially higher net income that improved the ratio of staff costs to traffic revenue. By 2004, these achievements had laid a solid foundation of commercial, technical, and financial success for future sector improvements, as demonstrated by excellent results in 2006.

Figure 2 ONCF Operational and Financial Indicators 1994-2009



Source: UIC, ONCF and Statistical Yearbooks of Morocco 1997-2008

5 Conclusion

Lessons learned from the Moroccan experience in restructuring state-owned railways are as follows.

- Typically, crisis is the best driver for reforming the railways. Government agreed to embark on a restructuring process only after a few years of financial crisis forced it to confront the fiscal implications of railways operations and management.

- Restructuring is a long process; in Morocco it took six to ten years. Restructuring required continuity in senior management and tenacity for implementation because it involved multiple stakeholders and a complete change of vision of railway activities. By contrast, almost instant and visible results must happen early on to establish credibility and get buy-in for further reforms; generally, this means rapid cost cutting.

- Government must make a huge financial contribution to expunge past debts. Government must make a clear commitment and abide by it—Morocco used the Contrat-programme tool.

- Government ministries and bodies must agree on and actively support the general restructuring strategy, but avoid meddling in railway enterprise management or 'tactical' implementation of the restructuring program.

- Restructuring champions are necessary, preferably inside the railway enterprise; in Morocco, a strong and dedicated general manager was substantially instrumental in the success. Champions keep the momentum going because railway management and staff must be convinced that restructuring is being undertaken to strengthen the railway, not to undermine it.