Viet Nam: Improving Public Expenditure Quality Program

# REFORMING RAILWAY AND METRO ASSET MANAGEMENT



This brief summarizes the findings of policy advice prepared by the Asian Development Bank (ADB) for the Viet Nam Ministry of Finance (MOF) to support improvements in the efficiency of national railway and urban metro asset management.

# Viet Nam's National Railway System

The Viet Nam national railway network is roughly 3,000 km long, including a 1,726 km line between Ha Noi and Ho Chi Minh City and two international links to the People's Republic of China. Although the network has been operational for more than 100 years, it remains relatively underdeveloped. Over the past decade, only 8% of state transport investment was spent on railroads, compared to almost 90% on roads. Railways carry only one-tenth the amount of freight and one-twentieth the number of passengers per kilometer carried by roads. At present, the railway network is run by a state single-shareholder, limited liability company, Viet Nam Railways (VNR). It is delegated to manage and maintain railway infrastructure assets and to utilize these assets for public services. The Viet Nam Railway Administration (VNRA) under the Ministry of Transport (MOT) is responsible for strategy, policy, planning, and regulation.

To revitalize the sector, the National Assembly passed a revised Law on Railways in June 2017, providing incentives for private sector investment and establishing a mediumterm public investment plan of \$350 million-\$400 million to upgrade rail infrastructure. The government has also begun major state-budget and official development assistance (ODA) financed investments in urban metros in Ha Noi and Ho Chi Minh City, with plans for them to be operational by 2020.

Efforts to upgrade national rail infrastructure, however, will only be successful if they are accompanied by major improvements in the efficiency and sustainability of public asset management systems in the sector.

The MOF has overall responsibility for establishing management norms and regulations for all state assets, while the MOT is responsible for the governing of rail systems. VNR is the sole supplier of rail services. The VNR pays 8% of gross revenues from its transport services as a track-access charge to the state. Like the MOF, neither VNR nor VNRA have a formal asset management system. Asset management is largely based on mutually agreed annual work plans and budgets.

Responsibility for the development of the metro system is also highly decentralized. The Ho Chi Minh City and Ha Noi Peoples' Committees (PCs) are responsible for the management of urban metro construction and eventual operation. Both PCs have established new government agencies to build the metro lines: in Ho Chi Minh City, the Management Authority for Urban Railways; and in Ha Noi, the Ha Noi Metropolitan Railway Management Board (with one line being an exception). Both PCs are also establishing institutions that will be responsible for the operation and maintenance of the metro lines.

## What is good public asset management?

General international practice for oversight of public assets is based on three key principles:

- (i) assets should be delegated to agencies that use the assets;
- (ii) the agency should be fully responsible for making effective use of and sustaining the assets; and
- (iii) overseeing agencies should not duplicate activities for which the overseen agency should be responsible, but should instead use other, more strategic means for ensuring that assets are well managed and used.

# Key Issues

Rail industry structure and asset management systems. VNR is a large enterprise. In addition to its parent company, it has 54 corporatized business units that have also been privatized to some extent. It is a highly disaggregated form of a traditional integrated railway enterprise. VNR does not have even a comprehensive asset register. It relies heavily on the knowledge and judgment of experienced staff to identify maintenance and future investment needs. Together with its 20 geographically based, infrastructure management companies and use of negotiated contracts rather than competitive tendering, this situation has hampered the coordination and efficiency of rail asset management.

# Operational efficiency and state budget subsidies.

Passenger fares are regulated by VNRA and are low, while freight tariffs are largely unregulated. Revenues generated by the sector are not related to operational costs and are propped up by large state subsidies, around \$55 million per annum. During 2012–2015, the sector generated annual

Since its establishment, the VNR has undergone an almost continual process of restructuring. As of end-2016, the company was overseen by a parent company with a management board that oversees (i) 13 semi-independent regional operations branches and other units for project management, emergency response, training, health, and building management; (ii) the Ha Noi Railway Company and the Saigon Railway Transport Joint Stock Company, each of which operates passenger and freight train services; (iii) 2 companies that are primarily involved in the repair and manufacture of train carriages; and (iv) 20 geographically based infrastructure management companies and 29 companies that undertake other various railway-related activities.



Passenger train cutting through dragon fruit fields, Binh Thuan Province.

revenues averaging \$15 million. This has covered operating costs plus around one-quarter of routine maintenance needs. Remaining maintenance costs and all capital expenditure are financed by the government subsidy. This system creates few incentives for operational efficiency and does not generate the revenues needed to make significant track upgrades.

### Sector strategies versus sustainable asset financing.

The adjusted Masterplan on Development of Viet Nam's Railway Transportation up to 2020, with a Vision to 2030 sets an ambitious agenda: to expand and upgrade Viet Nam's rail network to connect better with neighboring countries, link inland provinces to seaports, and establish a masstransport route between Ho Chi Minh City and Ha Noi. The total investment capital needed to achieve these objectives by 2020 is estimated at \$10 billion, of which over half has no funding source. Even if capital can be mobilized, undertaking this level of investment without first addressing the current financial underperformance of the railways will create major challenges for asset sustainability. Ongoing operations and maintenance costs will rise and without concurrent increases in revenue this could further erode the long-term financial viability of the sector.

Complexity of urban metro line operations. Viet Nam's urban metro system is currently managed by a variety of institutions and supported by various international funders. Many of the metro lines are being designed and built independently and there are not yet detailed plans for a centralized operations control center. This will affect the future coordination of operations and communication once construction has been completed. In some instances,

rolling stock and stations on different metro lines will use different standards and technologies, often sourced from the country of origin of the financiers. This situation will make it more challenging to create a high-quality integrated transport service for travelers.

### **Reform Priorities**

The ultimate objective for asset management in Viet Nam's rail system is to provide effective services in an efficient and financially sustainable manner. Some key reform priorities are:

### Establish a detailed railway asset management system.

A comprehensive register of railway assets held by VNR that is accessible by central government agencies like MOF and VNRA is prerequisite to improve the management of national rail infrastructure. If adequate resources are devoted to data collection, a register would provide information needed by oversight agencies to undertake auditing, to monitor usage trends, and to report on public assets. The asset register would need to record information on the condition and use of assets, linkages between assets, and risks associated with them. This step is an important precondition for determining if some assets would be better leased or hired rather than owned by the railways and for optimizing planning of maintenance, rehabilitation, and replacement.

Strengthen the financial performance of railway operators. To establish a financially sustainable, well maintained, rail network, train operating companies will need to collect more revenue and pay higher fees for use of railway infrastructure. More revenue can be collected



Train passing through the old quarter of Ha Noi.

by carrying more freight and passengers, but fares will also likely need to increase. Changing economic conditions and technology and shifts in the location and types of goods to be moved can mean that some parts of the rail network and some rail traditional activities may no longer be justified; their closure would lower operating costs and the need for capital investment. To achieve this, VNRA will need to improve its regulatory systems, preferably through the establishment of independent regulators, to overview such matters as track access charges and railway safety.

Coordinating the operation and maintenance of Ho Chi Minh City and Ha Noi metro lines. A thorough assessment is needed to determine how best to integrate the operations and maintenance of the multiple metro lines in Ho Chi Minh City and Ha Noi. This will be vital for efficient asset management and for the delivery of high-quality services to the people of Viet Nam. The final approach will need to plan across multimodal networks (including roads, mass rapid transport, and bus), specify future service and investment requirements, and procure services to be operated on a consistent basis. It would also need to ensure integrated operations (i.e., maintenance, scheduling, fares, and ticketing). One option may be the establishment of an integrated transport authority for

each city, taking overall policy and transport guidance from MOT and PCs. However, care would be needed to ensure a single transport authority that could coordinate efficiently the multiple technologies and operators. Policy and operational functions would need to be sufficiently separated to avoid conflicts of interest. An independent rail safety regulator is also envisaged.

# Longer-term Reform Objectives

Reform institutional structures and regulations for managing railway assets. Consideration should be given to consolidating the various business units of VNR into fewer units that can operate more efficiently: for example, consolidate the current 20 geographically based infrastructure management companies into larger, regional and potentially national companies that compete vigorously with each other. A new business unit could be created to provide, maintain, and operate the railway network. Competitive tendering should be used more extensively to reduce ongoing maintenance and operations costs and improve the quality of work.

Investigate private sector approaches to financing both rail and urban metro infrastructure. In the future, consideration should be given to arrangements that reduce the need for state budget funds in exchange for additional private sector capital to construct and improve the operational efficiency of new rail and metro lines. This can take place through public-private partnerships and buildoperate-transfer models. Given the inherent risks involved in both metro and rail construction a potential approach is for government to plan and finance fixed infrastructure. Competitive tendering can then be used to secure private company funds to construct additional infrastructure, finance and supply trains, and operate the systems.

ADB, through its Improving Public Expenditure Quality program, has provided policy and technical assistance to address critical public financial management weaknesses, increase the efficiency of public expenditure, and improve infrastructure and services for the people of Viet Nam since 2014.

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