ECONOMIC AND SOCIAL COMMISSION FOR WESTERN ASIA (ESCWA)

STUDY ON
FINANCING THE IMPLEMENTATION OF SELECTED COMPONENTS
OF THE INTEGRATED TRANSPORT SYSTEM
IN THE ARAB MASHREQ (ITSAM)

United Nations
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United Nations
New York, 2011
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Introduction

The transport sector is an important component in the economy; it can be an effective element in developing the prosperity of a society. When transport systems are efficient, they provide economic and social opportunities that contribute to overall economic growth.

The main sources of funding for developing transport infrastructure development include allocations from Government budgets, domestic and foreign loans and official development assistance from donors.

Governments are finding it increasingly difficult to meet their funding needs through these sources. Consequently, there has been a need to diversify the sources of funding for developing transport infrastructure in many countries.

In recent years, specific user taxes, earmarked funds, retained earnings, tolls and private-sector participation have played an important role in developing infrastructure in many countries. The role and significance of these sources varies from country to country, though influencing factors include the level of social, economic and political development; the level of sophistication of domestic financial markets; the level of disposable income; and the extent and efficiency of direct and indirect taxation regimes.

The present desk study provides: (i) an assessment of the actual practices undertaken by the member countries of the Economic and Social Commission for Western Asia (ESCWA) to finance the implementation of selected components of the Integrated Transport System in the Arab Mashreq; and (ii) a proposed action plan to initiate or activate measures to finance the implementation of selected components of the Integrated Transport System in the Arab Mashreq (ITSAM). It includes an overview of recent trends in the financing the development of transport infrastructure in the countries of the ESCWA region, their experiences, and the financing arrangements that have emerged. It also proposes issues that are perceived as being constraints and impediments to private-sector participation. Finally, it raises issues for consideration by national Governments and identifies possible plans of action at the national, subregional and regional levels.
1. PUBLIC SECTOR FINANCING OF TRANSPORT INFRASTRUCTURE

A. INTRODUCTION

Many countries in the ESCWA region are currently implementing ambitious transport development plans, particularly in the road, railway, maritime and airport Sectors. Almost all of them ratified ITSAM agreements.

Transport is crucial for achieving economic growth and trade at national, regional and global levels as well as for facilitating a wide variety of public and social services. Meanwhile, the lack of access to safe and effective transport coupled with rapid urbanization constrains development in many developing countries, including the Arab countries. Historically, the development of the transport sector in a given country has been an indicator for its economic success. It is probably the largest sector in the world, in terms of financial turnover, workforce and resource use. The direct value added by the transport sector to the gross domestic product (GDP) is approximately 3 to 5 per cent and on average transport directly provides 5 to 8 per cent of total paid employment.

A recent study revealed that for all infrastructure sectors, there is an investment gap. For example, Arab countries invest US$60 billion per year whereas they need US$100 billion, which creates a financing gap of US$40 billion.1

With ESCWA countries facing huge shortfalls in investment and the consequent impact for economic growth, there is an urgent need to consider measures to secure the additional funding needs for transport and infrastructure. There are five major sources of financing in the transport sector: Government budget; official development assistance (as is the case with Palestine); off-budget resources; surpluses generated from existing transport organizations and public-private partnerships (PPPs). The discussions contained herein focuses mainly on funding from Government budgets, off-budget resources and PPPs.

B. ALLOCATION FROM GOVERNMENT BUDGET

Direct allocations from the Government budgets and donor funds continue to be the main sources of investment in many countries, particularly in the road and railway subsectors. In recent years, budget allocations have increased in real terms to meet growing investment needs in most countries. However, the share of direct budgetary allocations has declined over the years in many countries. There are three main reasons for the general trend towards lower levels of financing from direct budgetary allocations: (i) the huge resource requirements, which motivated countries to explore various off-budget mechanisms; (ii) competing demands from other sectors facing Governments; and (iii) the decentralization process taking place in many countries.

It is likely, however, that, in the foreseeable future, significant levels of funding for transport infrastructure in many developing countries will have to be drawn from Government budgets. Consequently, there is a need to continue to pay attention to this source of funds. There remains scope for Governments to increase their tax and non-tax revenues as a share of GDP. This is particularly true in countries with a low Government revenue-to-GDP ratio.2

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1 Presentation on Financing Infrastructure Projects made by Khaled Hussein at the Expert Group Meeting on Financing Transport Infrastructure and Road Safety in the ESCWA Region, co-organized by ESCWA and the Ministry of Transportation, Manama, Bahrain, 1-3 February 2011.

C. OFF-BUDGET RESOURCES

There are a wide range of off-budget financing options that can be used to support the development of transport infrastructure. The most common forms are: (i) direct user charges and indirect beneficiary payments, which include fees and taxes; (ii) debt financing, which includes borrowing from financial institutions and development banks; and (iii) access to capital markets through different types of financial tools. An analysis of recent trends shows that off-budget sources are providing an increasing share of total investment needs in many countries. Direct charges to users and beneficiaries are becoming more prevalent. Even in the road sector, where it is still common to consider roads as public goods, it is evident that the acceptance of toll charges is growing in the region. This section provides a brief survey on the off-budget financing sources that are now being practiced in the region.

1. User charges and indirect beneficiary payments

(a) Earmarked taxes and user fees: Many countries have introduced special taxes, including a tax on transport fuel, vehicle purchase taxes and various user fees. The purpose of these special taxes is to generate funds for investment in the transport sector. Other countries have earmarked a certain percentage of the tax collected from fuel and other sources for the financing of transport projects, particularly in the road sector. Funds from these earmarked taxes provide a significant portion of investment needs. Earmarked special taxes and user fees are in place in many countries;

(b) Dedicated road maintenance funds: Funds available to the road sector from Government budgetary allocations are often significantly less than the amount required to implement new road projects and maintain the road network. Faced with this problem, Governments have taken measures to improve the inflow of resources and the effectiveness of the management of these resources through the establishment of a dedicated road fund. Yemen, for instance, has created a dedicated special fund for its road sector. The revenues for such funds are obtained from levies and sub-charges which are often called user charges. These charges are generally divided into three categories: vehicle licence fees, levies on fuel and tolls. Experience suggests that road funds have greatly helped countries to finance their road sector. Road funds have been particularly effective at helping countries to cover perennial deficiencies in road maintenance;

(c) Tolls: While collecting fees directly from road users is a relatively new method and now common in most developing countries of the region, toll revenues cover a significant portion of the road sector budget in ESCWA countries and are used, for example, in both Egypt and the United Arab Emirates;

(d) Indirect beneficiary payments: Systems for collecting payment from the indirect beneficiaries of transport projects continue to be a major source of funding in some ESCWA countries. For example, such systems are used in the United Arab Emirates, including a capital gains tax in the form of certain land-related taxes and fees imposed on property owners and developers. Such funds were utilized, for instance, for the direct funding of an intersection built by the Roads and Transport Authority (RTA) at the expense of TECOM Investments as master developer.

2. Debt financing

(a) Loans from domestic and foreign banks, financial institutions and development banks: Debt financing has become an important way to finance transport projects. However, it is difficult to ascertain its exact share in the financing of such projects, particularly the share from international financing institutions. Many important transport projects and programmes in the region are at least partially debt-financed by domestic and international financing institutions. Consequently, if governmental funds are not sufficient, finance can be potentially obtained from lenders, be this the Public Investment Fund in Saudi Arabia or

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3 See: www.rta.ae.
organizations like the Arab Fund for Economic and Social Development,4 the Kuwait Fund for Arab Economic Development5 or the Islamic Development Bank,6 to name but a few in the ESCWA region. In addition, loans are potentially available within the Euro-Mediterranean Cooperation which are provided by the European Investment Bank (EIB) and the German KfW bank group, among others. At a global level, support can be received from the International Finance Corporation (IFC) and World Bank;7

(b) Bonds: Bonds are a relatively new mode of financing in the ESCWA region which is used by a limited number of countries for the financing of large investment plans for projects;

(c) Securitization: Securitization of existing assets is another relatively new mechanism for raising funds through initial public offerings (IPO). The main advantage of this financing option is its low cost, although its greatest disadvantage is the amount of time required to complete the regulatory formalities.

3. Access to capital markets through different types of financial tools

For example, in 2005, the liberalization of the airline industry was introduced in Kuwait, as a result of which Jazeera Airways8 was established as a privately-owned airline registered in Kuwait as a public joint stock company. Wataniya Airways9 was also established in Kuwait in 2006 by IPO.

Air Arabia based in Sharjah is another example. Its shares have been traded at the Dubai Financial Market since 2007, the stake of the Civil Aviation Authority of Sharjah being 17.4 per cent.10

D. PUBLIC-PRIVATE PARTNERSHIPS

1. Introduction

Governments worldwide have increasingly turned to the private sector for additional resources, increased efficiency and sustainable development in many fields, including that of transport infrastructure and services. Following trends in other fields, private sector involvement in the transport sector has now become common in many countries in the ESCWA region. More recently, as in other sectors of the economy, the paradigm shift towards a market economy has also led to a growing interest in PPPs in the transport sector.

2. The role of public-private partnerships

The ability to attract private-sector finance in the transport sector has varied considerably across the ESCWA region but remains, on the whole, low. Some countries, like the United Arab Emirates, have opened up their system to foreign investors who now actively participate in developing the transport sector. Other such countries as the Syrian Arab Republic have had very limited success, to date, in attracting investors in the transport sector. It must also be noted that such mode facilities as airports are more attractive to private investors due to their traffic robustness and the regular cash flow associated with this type of facility.

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4 See: www.arabfund.org.
10 See: www.dfm.ae for company information on Air Arabia.
Internationally, the private sector participates in the provision of transport services and infrastructure in various forms:11

(a) Outright private ownership and operation of transport infrastructure: for instance worldwide port and airport terminals, railways in the United States of America, Australia or South America;

(b) Private operations of State-owned assets in the form of concessions: for instance railways in the United Kingdom and airport terminals in Asia;

(c) Different forms of PPPs where the public and private sectors work together to build and operate transport infrastructure, mainly roads.

Generally, the reasons to involve the private sector in transport are twofold: assumed efficiency gains and fundraising. If the operation of transport services is separable from that of infrastructure,12 transport operations by the private sector will normally be more efficient than State-provided services, and able to fund investments in equipment and the subsequent operations without Government involvement.13 If, however, the private sector is involved in the provision of transport infrastructure, the issues are more complex: transport infrastructures often represent natural monopolies or have significant market power for those who control the prime site. This limits competition and the regulation of the operation becomes of major importance.14 In all these cases, the operation of the infrastructure needs careful planning and supervision by the public sector. It is this regulatory oversight which many countries lack, and the results are often legal disagreements between the private operator and the private sector and the Government, which frequently leads to the failure of concessions and PPPs.

Private sector investors are only willing to commit significant funds in countries where they know that legal contracts stand the test of time. In addition, the regulation of private transport operations can be complex and requires independent agencies, staffed with highly trained and experienced personnel. Many countries do not have such agencies which need to be operated independently from the ministries. Therefore, in order to attract the private sector to participate in the provision of infrastructure, the legal system in each country must ensure that concessions and agreements will be honoured and transparent procurement processes to encourage competition are put in place.

In the short term, the least complicated way to involve the private sector in the provision of transport infrastructure and transport services is the outright private ownership and operation of the assets. Examples are port or airport terminals, logistics centres, and some railway lines, mainly those used for the transport of natural resources to port terminals. An intermediate solution for more advanced countries would be to award concessions for the operation and maintenance of existing roads or railroads. In those cases, the private sector would not have to invest large sums of money, but could test the situation with limited investments.

3. Advantages and disadvantages of PPP projects

(a) Advantages of PPP projects

The following are the basic advantages of PPP projects:

- PPPs allow more efficient and higher-quality processes of construction and operation of the infrastructure and provision of required services by entities of the private sector, compared with public-sector entities. What is essential at this point is to ensure the project, while respecting the

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12 As is the case in airlines, stevedores, shipping lines, barge companies, road haulage companies, bus companies, freight forwarding and logistics companies.
13 Exceptions are subsidies for concessionary fares, or grants for services which are economically but not financially viable.
14 Examples are toll motorways, operating concessions for railways or some major airports with almost no competition.
principles of economy and usefulness (utility), trying to make sure that project costs are not exceeded and set deadlines are met. Here, the private sector plays an important role in increasing quality and efficiency through their innovative efforts;

- The private sector resolves the problem of the public sector’s limited disposable sources, whereas the capital power of the private sector entities can be sensibly used for the implementation of those projects whose execution would not be possible without such partnership, and thus enable a faster development of the infrastructure. At the same time, faster project implementation leads to lower cost rates of the projects, resulting from the effects of the time value of money and the pressure of inflation;

- They increase benefits and satisfaction for the citizens resulting from the utilization of the know-how of private companies in applicable operational areas and from their distinct motivation prompted by the prospects of long-term income. At the same time, they increase the chance of meeting all contractual terms and conditions concerning the quality of the provided services, while the required standard is continuously evaluated and controlled by the public sector;

- They strengthen public administration through the introduction of new purposively and economically thinking partners into the provision of public services. Public interests and needs are met and the shortened process of decision-making diminishes bureaucracy. From the macroeconomic point of view, it is another important advantage that, when this type of project is being applied, a substantial part of the risk is transferred to the private entity; therefore, no State securities are required.

(b) Disadvantages of PPP projects

The basic disadvantages of PPP projects are:

- PPP projects prefer the economic aspects of the project to the social, environmental and other aspects;

- The preparation of individual PPP projects is slow and may take up to two years, if high-standard project preparation is expected;

- Demands are high as to ensuring transparent relationships, starting with partner selection, definition of terms and conditions, competences and responsibilities until contract conclusion itself, which is escalated by the long-term and complicated character of the contracts concluded;

- If the partnership has to be repudiated, considerable negative financial impacts are to be expected;

- Risks may possibly be transferred from the private to the public sector, for instance the risk of bankruptcy;

- Partners from the public sector may be insufficiently experienced in contracting such projects. An informational asymmetry can be noticed, operating in favour of private companies, which naturally use their potential to negotiate better conditions for themselves;

- From the macroeconomic point of view, and as a consequence of the long-term character of these projects, mandatory expenses grow and hidden debts rise. It can take years to clear these debts, which can have a negative effect on the fighting power of future Governments and burden future generations significantly.
4. Models of PPP

A wide spectrum of PPP models has emerged, which mainly vary by: 15

- Ownership of capital assets;
- Responsibility for investment;
- Assumption of risks;
- Duration of contract.

PPP models can be classified into five broad categories in order of generally, but not always, increased involvement and assumption of risks by the private sector. The five categories are:

- Supply and management contracts;
- Turnkey contracts;
- Lease;
- Concessions;
- Private finance initiative (PFI) and private ownership.

5. Different financing types with private-sector partnership

Different types of project implementation and operation models do not present any new technical development in design or construction. They do, however, present new types of contracts: 16

(a) Public-private partnership (PPP);
(b) Build, operate and transfer (BOT);
(c) Build, own and operate (BOO);
(d) Build, own, operate and transfer (BOOT);
(e) Build, lease and transfer (BLT);
(f) Build, transfer and operate (BTO);
(g) Build and transfer (BT);
(h) Design, build, finance and operate (DBFO);
(i) Design, construct, manage and finance (DCMF);
(j) Modernize, own/operate and transfer (MOT);
(k) Rehabilitate, own and transfer (ROT).

6. Understanding the basic structure of a PPP arrangement 17

A typical PPP structure can be quite complex, involving contractual arrangements between a number of parties, including the Government, project sponsors, project operators, financiers, suppliers, contractors, engineers, such third parties as financial institutions, and customers.

The creation of a separate commercial venture called a special purpose/project vehicle (SPV) is a key feature of most PPPs. The SPV is a legal entity that undertakes a project and negotiates contract agreements with other parties, including the Government. An SPV is also the preferred mode of PPP project

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implementation in limited or non-recourse situations, where the lenders rely on the cash flow of the project and security over its assets as the only means to repay debts.

The following figure shows a simplified PPP structure. The actual structure of a PPP, however, depends on the type of partnership model and can be quite complex, involving contractual arrangements between a number of parties including the Government, project sponsors, project operators, financiers, suppliers, contractors, engineers, such third parties as financial institutions, an example being an escrow agent, and customers.

Figure. Typical structure of a PPP project

An SPV is usually set up by the private concessionaire/sponsor, who, in exchange for shares representing ownership in the SPV, contributes the long-term equity capital and agrees to lead the project. The SPV may not always be directly owned by the sponsors. They may use a holding company for this purpose.

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18 An escrow agent, normally a financial institution, is appointed by the project company and the lenders for managing an account called escrow account. The escrow account is set up to hold funds, including project revenues, accrued to the project company. The funds in the account are disbursed by the escrow agent to various parties in accordance with the conditions of the agreements. An escrow account is also used to hold a deposit in trust until certain specified conditions are met.

19 The box on the right side labeled “Experts” represents various participating groups in a PPP project, including engineer (designer), contractor (builder), operator and insurer. Similarly, the box on the left side labeled “Financiers” includes various parties investing in a project comprising equity and debt financiers which may include domestic and foreign banks and financial institutions, bilateral and multilateral donor agencies, development banks, and similar other agencies.

20 An SPV is a commercial company established under the relevant act of a country through an agreement, also known as memorandum of association, between the shareholders or sponsors. The shareholders agreement sets out the basis on which a company is established, giving such details as its name, ownership structure, management control and corporate matters, authorized share capital and the extent of the liabilities of its members. The authorized share capital is the maximum amount of equity capital, measured at par value, that a company is allowed to raise by issuing shares to existing or potential shareholders or investors. The shareholders of a company may be granted special privileges on such matters as elections to the company’s board, the right to purchase new shares issued by the company and the right to share in distribution of the company income. It is, however, important to mention here that in the event of liquidation of the company, the rights of shareholders to a company’s assets are subordinate, or “junior”, to the rights of the company lenders.
An important characteristic of an SPV as a company is that it cannot undertake any business that is not part of the project. An SPV as a separate legal entity protects the interests of both the lenders and the investors. The formation of an SPV has also many other advantages. A project may be too large and complicated to be undertaken by one single investor considering its investment size, management and operational skills required and risks involved. In such a case, the SPV mechanism allows bringing in other investors who could invest, contribute technical and management capacity and share risks, as necessary.

The Government may also contribute to the long-term equity capital of the SPV in exchange of shares. In such a case, the SPV is established as a joint venture company between the public and private sectors, and the Government acquires equal rights and equivalent interests to the assets within the SPV as other private sector shareholders.

Sometimes, Governments want to ensure a continued interest, with or without controlling authority, in the management and operations of such infrastructure assets as a port or an airport, particularly strategically important ones, or in assets that require significant financial contribution from the Government. If this is the case, a joint venture may be established. A joint venture is an operating company owned by a Government entity and a private company, or multiple companies including foreign companies if permitted by law, or a consortium of private companies.

Often, an SPV is formed as a joint venture between an experienced construction company and a service operations company capable of operating and maintaining the project.

Other than its strategic, financial and economic interest, the Government may also like to directly participate in a PPP project. The main reasons for such direct involvement may include:

- To hold interest in strategic assets;
- To address political sensitivity and fulfill social obligations;
- To ensure commercial viability of the project;
- To provide greater confidence to lenders;
- To have better insight in order to protect public interest.

Direct Government involvement in a PPP project is usually guided by the legal and regulatory regime of the country and the Government policy on PPPs. For example, the Government may hold a certain defined percentage of the stake in such a strategic project as an airport or a port.

7. Institutional arrangements for PPPs

Many Governments in the ESCWA region have spelled out their policy and regulatory frameworks. Some Governments have gone beyond their usual roles of formulating policy, streamlining administrative processes and creating a supportive legal environment. They have established specialized units and devised suitable legal instruments to provide active support for private-sector activities in infrastructure development.

(a) The following are examples of special PPP units in ESCWA countries:

(i) Action Group for Tailoring the Institutional and Legislative Frameworks of Transport Sector, ESCWA, 17 May 2011.\textsuperscript{21} The aim of this group is to provide recommendations to the ESCWA Transport Committee related to tailoring the institutional and legislative frameworks of the transport sector. It consists of member country representatives and the ESCWA executive secretariat;

(ii) PPP Unit in the Ministry of Transport, the Syrian Arab Republic;

(iii) PPP Central Unit, Ministry of Finance, Egypt.

(b) Special instruments in support of private participation in transport infrastructure:

(i) The Saudi Railway Company (SAR) is a publicly owned railway company with shares to be floated once the railway is positively operational (North-South Railway (NSR) project);\(^{22}\)

(ii) The United Arab Emirates Union Railway Company will develop the National Railway Network;\(^{23}\)

(iii) The Kuwait Railway Network will be developed by Government (24 per cent), public (50 per cent) and private investors (26 per cent);

(vi) The Qatar National Railway and Metro Network will be developed with Government (51 per cent) and private funding (49 per cent).

\(^{22}\) See: www.sar.com.sa.

\(^{23}\) See: www.unionrailway.com.
II. ACTUAL PRACTICES UNDERTAKEN BY ESCWA COUNTRIES TO FINANCE THE IMPLEMENTATION OF SELECTED COMPONENTS OF ITSAM PROJECTS

A. INTRODUCTION

The countries of ESCWA, namely Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, the Sudan, Syrian Arab Republic, United Arab Emirates, and Yemen, are very diverse in their economic structures. Some are rich in natural resources, such as oil and gas, with small populations. Their strategic planning is therefore different from those countries with larger populations and relatively less natural resources. Some countries of the ESCWA region are to be considered, from the perspective of economic power and current ability, as emerging and developing countries, whereas others are on the edge of being classified as industrialized nations or high-income economies.\(^\text{24}\) This diverse economic structure is the reason that, in financing transport infrastructure, ESCWA member countries are confronted with different financing prospects: some countries are almost entirely financially independent due to their rich natural resources, whereas others are strongly dependent on foreign aid and international financial assistance, which is the case in countries with limited resources aside from their human capital.

It is recognized that the provision of sufficient transport infrastructure is a necessity. Transport is essential for achieving economic growth and trade at national, regional and international levels as well as for facilitating a wide variety of public and social services and motivating intra-trade efficiency in ESCWA countries.

B. COMPONENTS OF ITSAM

As part of the process of developing ITSAM, ESCWA has concluded a number of agreements:

(a) Agreement on International Roads in the Arab Mashreq entered into force on 19 October 2003 and was ratified by 13 countries, namely, Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Palestine, Qatar, Saudi Arabia, the Sudan, Syrian Arab Republic, United Arab Emirates, and Yemen;\(^\text{25}\)

(b) Agreement on International Railways in the Arab Mashreq entered into force on 23 May 2005 and was ratified by nine countries, namely, Bahrain, Egypt, Jordan, Lebanon, Palestine, Saudi Arabia, the Sudan, Syrian Arab Republic, and Yemen;\(^\text{26}\)

(c) Memorandum of Understanding on Maritime Transport Cooperation entered into force on 4 September 2006 and was ratified by ten countries, namely, Iraq, Jordan, Lebanon, Oman, Palestine, Saudi Arabia, the Sudan, Syrian Arab Republic, United Arab Emirates and Yemen;\(^\text{27}\)

(d) The establishment of national committees on trade and transport in eleven countries, initiated in 2003: committees have been established in Bahrain, Egypt, Iraq, Jordan, Lebanon, Oman, Palestine, Saudi Arabia, the Sudan, Syrian Arab Republic, and Yemen;\(^\text{28}\)


\(^{26}\) See: E/ESCWA/EDGD/2011/IG.1/5(Part II).

\(^{27}\) See: E/ESCWA/EDGD/2011/IG.1/5(Part I).

\(^{28}\) See: E/ESCWA/EDGD/2011/IG.1/5(Part II).
(c) Ensuring Road and Traffic Safety, also with the aim of strengthening links between the countries of the region thereby achieving regional integration. With the entry into force of all agreements at the initiation of ITSAM, it became necessary to ensure their implementation. A well-functioning transport system is an important and necessary condition for economic growth and integration in ESCWA countries.

The following are the actual practices undertaken by ESCWA countries to finance the implementation of selected components of ITSAM projects.

1. **Bahrain**

Bahrain has a number of transport infrastructure projects under investigation or consideration. Bahrain, being an archipelago of 33 islands with four main islands, is connected by the 25km-long King Fahd Causeway to Al Khobar in the Eastern Province of Saudi Arabia. The King Fahd Causeway is owned and run by a bilateral authority established by a bilateral agreement between Bahrain and Saudi Arabia ratified by corresponding Amiri and royal decrees in 1986. This bilateral organization is responsible for the operation and maintenance of the causeway. It is financed through subsidies of the respective Governments and collects toll fees for its usage.

Bahrain has a 3 per cent annual population growth rate. At present, the population is about 1.3 million, but it is expected that the population will be doubled by 2030, according to information from the Bahraini Ministry of Works. In 2003, a strategic roads master plan was prepared, which envisaged the extension of the road network in two stages to be completed by 2011 and 2021. The costs for the extension of the road network were estimated between US$2 and 3 billion. The road network alone, however, will not be able to cater for all needs of mobility. Therefore, an integrated transport strategy is envisaged for 2030. The public transport master plan 2030 envisages a six-line public transport network of 185 km in total. It consists of two light rail lines, one tram and one monorail in addition to two rapid transit bus lines. The estimated costs for the initial 24 km of light rail transit (LRT) and tram to be built by 2015 are 453 million Bahraini dinar (BD). Between 2016 and -2021, another 72 km shall be added to LRT, monorail and bus lines at an estimated cost of BD1.5 billion and, lastly, from 2022 to 2030, another 87 km shall be added to LRT, monorail, tram and bus rapid transit (BRT) at a cost of BD1.2 billion, which brings the total cost to about BD3 billion, approximately US$8 billion. These are the major projects for urban and rural passenger transport.

Within the railway network of the Gulf Cooperation Council (GCC), two major railway projects, rated in terms of their required financial investment, are considered a challenge to the GCC as a whole and to the Kingdom of Bahrain in particular. These are the rail bridges from Saudi Arabia to Bahrain and from Bahrain to Qatar. The huge construction cost for these bridges may raise doubts on their feasibility. However, the projects would integrate Bahrain into the GCC railway system. The damage of not being connected would be considerable for Bahrain.

2. **Egypt**

Egypt has a long-lasting history of real privatization by means of divestiture of formerly nationalized assets, starting in 1869 with the Suez Canal, which is operated under a BOT contract.

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29 See also ESCWA Resolution 256 (XXIII).
32 Presentation “Strategic Transport Sector Initiatives-Brief Overview” delivered by Hoda Fahkro, Ministry of Works, Bahrain, at the ESCWA Expert Group Meeting on Financing Transport Infrastructure and Road Safety in the ESCWA Region, Manama, Bahrain, 1-3 February 2011.
The Cairo International Airport has been privately operated since 2005 by Fraport, the owner and manager of Frankfurt International Airport. The Egyptian National Railways, however, does not yet follow PPP or a privatization model. It is one of the big national employers, having a workforce of 86,000 employees.

The infrastructure of the transport sector does not have much experience yet, as the dependency on international aid is high and user charges can only be imposed at a minimal level. However, it is under consideration to make use of PPP structures, for example by arranging for the extension of the Cairo-Alexandria highway with a length of 162 km by a design-build-finance-operate-and-maintain (DBFOM) contract with a 20 year concession. Similar projects for the Alexandria Ring Road and others are in the pipeline stage and under study by the Ministry of Transportation. Moreover, a 20-year PPP concession is under consideration by the PPP Central Unit at the Ministry of Finance to grant a PPP project for the Heliopolis metro. In addition, PPP projects are in preparation for the construction of the Cairo-Ismailia highway and two international airports in Marsa Alam and Al Almayn.

3. Iraq

So far, transport infrastructure has been financed by the Government of the provinces themselves. In addition, international aid is available for reconstruction. Highways are reconstructed mainly by State-owned construction companies. Rehabilitation of the State-owned rail network is in progress.

4. Jordan

Major road construction projects are being implemented for instance the Amman Ring Road, which is financed by such international donors as EIB, World Bank and Arab Fund. However, the Ministry of Public Works and Housing is currently undertaking a study to maximize private-sector participation in road financing.

The existing railway network has been subject to privatization efforts for several years. This relates to both rehabilitation of existing lines and the construction of a new line connecting Jordan to Iraq from west to east, which will be linked to the south with the Saudi Arabian North-South Railway line. The legal framework has been set, comprising a recently introduced revised railway law as well as a rail regulatory commission.

Jordan has developed a significant framework for PPP and private-sector participation in general. The Ministry of Transport, in particular the Land Transport Department, is in charge of those affairs. In addition, there is a Land Transport Regulatory Commission to further strengthen private-sector participation in public transport. However, Jordan still maintains a number of public bus operators. The integration of the private sector mainly sees the introduction of private rail operators who pay user fees to the Government, which still owns and maintains the rail infrastructure.

Currently, the railway sector consists of just a few older facilities, one of which is the Jordan-Hejaz railway, with only the remains of the old railway, which is not operative on a commercial basis. The other line is the Aqaba Railway, which has the main task of being a freight railway for phosphate transports to the Aqaba sea port. The plan is to establish two links, one from Syria through Jordan to Aqaba and another link

34 See: www.egytrail.gov.eg.
35 See: www.pppcentralunit.mof.gov.eg/PPPCUSite/Content/Sectors/Transportations/Roads/.
from Al Zarqa to Iraq, with a length of 291 km, and a shorter one, with 90.5 km, to Saudi Arabia connecting Jordan with the North-South Railway of Saudi Arabia. Estimated cost for construction is 2.2 billion Jordanian dinar (JD), which equals to US$3.09 billion. The construction includes works for tunnels and viaducts. It is envisaged to have a State-owned infrastructure company and privately owned rail operating companies. By this, Jordan follows the dual structure of vertical disintegration as practiced in the European Union.

The seaport container terminal is managed and operated by Aqaba Container Terminal (ACT), a joint venture established in 2006 between the Aqaba Development Corporation (ADC) and A. P. Moller Terminals.

An important project for the rehabilitation and management of the Queen Alia International Airport in Amman includes a new terminal for nine million passengers per year. The estimated cost is US$700 million.

Royal Jordanian Airlines has been privatized as a joint stock company listed on the Amman Stock Exchange, with the Government of Jordan holding a 29 per cent stake. The feasibility of the company was somehow secured until 2010 with the exclusive right to operate international flights out of Amman.

5. Kuwait

The railway projects intended to join the GCC railway network are still under consideration by the Kuwaiti Government. A 550 km network will connect Iraq to Saudi Arabia and, therefore, cross the entire country from north to south. The project is expected to be Government-financed. However, details on funding are still under study. In addition, guides to transport systems are envisaged to enhance urban transport. At present, a publicly owned bus operator, namely the Kuwait Public Transport Company, serves the population with scheduled services together with City Group Co., a privately owned bus operator, which operates partially on the same route with a fleet of 500 buses in Kuwait.

6. Lebanon

Strong privatization efforts were pursued in the fields of electricity and telecommunication, but matters of the transport sector are mainly financed by the Government. However, there are considerable international grants and loans. Lebanon does not have any railway operations.

7. Oman

A railway network connecting Oman to the GCC rail network is under consideration, which is expected to be mainly financed by the Government.

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A consortium comprising of the British Airport Authority (BAA), Bahwan Trading Company and ABB Equity Ventures assumed the management and development of Muscat and Salalah Airports effective since January 2002, under a 25-year concession deal as part of the privatization plan for both airports; whereby the Oman Airports Management Company was formed.

In November 2004, the Government of Oman reassumed the management and development of Muscat and Salalah Airports, since the Government of Oman and the partners of the Oman Airports Management Company could not reach an agreement on the financial basis for the development of the new terminal at Muscat International Airport. Oman Airports Management Company is maintained with a change in the shareholding of the company.44

8. Palestine

The West Bank and Gaza Strip, administered by the Palestinian Authority, relies heavily on official development assistance. Therefore, all transport infrastructure projects are funded by such international aid and donor organizations as the United Nations Development Programme (UNDP), the United States Agency for International Development (USAID) and World Bank.

The Palestinian Authority maintains a road network of some 5,800 km. A recent project is the rehabilitation and extension of the road connecting the Bethlehem region with the Jerusalem-Jericho/Dead Sea Highway, which is called Wadi an-Nar Road. In the past, this road used was a small road cutting through fields. Until the end of the 1990s, the genuine road traffic followed the Bethlehem-Jerusalem route, which is the main road from Jerusalem to Hebron. This road was closed by Israel, as access for people in the West Bank to Jerusalem was denied. Consequently, a bypass road was developed by the users surrounding Israeli-controlled land around East Jerusalem. This path with a high vertical drop was extended. 1.5 lanes became three lanes, and the time to travel was reduced considerably. This project was financed by USAID45 and awarded by the Ministry of Public Works and Housing of the Palestinian Authority. Other road infrastructure projects are tendered through the municipalities and financed either by UNDP, USAID or World Bank. In the past, some projects were also pursued by the Palestinian Economic Council for Development and Reconstruction (PECDAR).46 In 2009, USAID rehabilitated 64 km of roads to facilitate the movement of persons and goods in order to enhance economic growth.47

9. Qatar

A joint venture was signed between Qatari Diar, an investment company of the Qatari Government, which is wholly-owned by the Qatar Investment Authority, and German railways Deutsche Bahn International to develop the planning of and potentially procure required railway infrastructure with a cost of US$25 billion. The main axis of this project will start from Metro Doha, travel via the Losil Light Rail Transit Network, Education City and the West Gulf Area and end at Doha International Airport and Ras Laffan Industrial City. This project will also connect with the GCC network and is one of the infrastructure projects preparing for the World Cup in Qatar in 2022.48

44 See: www.omanairports.com/seeb-airporthistory.asp.
46 See: www.pecedar.ps; website of the Palestinian Economic Council for Development and Reconstruction.
The Qatari Government is intending to establish an urban passenger rail service as well as a freight and a passenger railway, connecting it to the Saudi railway system under the framework of the GCC railway system and to Bahrain by bridge. The Government is expected to pay for the infrastructure. Still under consideration is the financing for the consequent operation.

In addition, the Qatar Bahrain Causeway Foundation envisages building a bridge for vehicles between the two countries. It was also decided to add a rail track, requiring a revision of existing technical studies. Expected completion will be in 2015, at a cost of approximately US$5 billion.

10. Saudi Arabia

The first BOT contract in the region was signed in 2007 between the General Authority of Civil Aviation (GACA) in Saudi Arabia and the Saudi Binladin Group (SBG) covering the extension and operation of the Hajj Terminal at Jeddah King Abdulaziz International Airport. The contract deals with an investment of US$315 million, out of which US$205 million are financed by bank loans. The operation period under the concession is 20 years following completion.

In Saudi Arabia, several railway projects are currently being executed. The Makkah Metro, which links the holy sites of Mina, Arafat and Muzdalifa with Makkah, is a project under implementation, which is fully Government-financed. It is financed and awarded by the Saudi Arabian Ministry of Municipal and Rural Affairs.

Established at a cost of 6.5 billion Saudi riyal (SR), the new railway will have a capacity to transport 72,000 pilgrims per hour. Nine stations have been constructed in Arafat, Mina and Muzdalifa, three stations in each. This is the second-largest project implemented by the Ministry of Municipal and Rural Affairs after the SR4.5 billion high-tech Jamrat Bridge project in Mina. Saudi authorities have not yet fixed the fare, and the matter is in the hands of Second Deputy Premier and Minister of Interior, Prince Naif, Chairman of the Supreme Hajj Committee. This shows that commercial gain is not the major concern in this project, indicating that the Saudi Arabian Government takes it as one of its most important obligations to cater for pilgrims at the holy places, irrespective of the question of how to finance the investment.

The Haramain High Speed Railway connecting Madina, King Abdullah Economic City, Jeddah and Makkah is currently in its first phase, meaning that civil construction work is already in progress. The owner is the Saudi Railways Organization, which operates the existing rail network in the Eastern Province of Saudi Arabia. The project is fully Government-financed. The second phase, comprising track, signaling, telecommunication, power, and catenaries, among others, will be awarded at a later stage as a design-build-operate-maintain (DBOM) contract, financed, however, by the Saudi Railways Organization.

Another railway which will link Saudi Arabia to the GCC network is still under consideration to be financed as PPP.

The North-South Railway project linking the north of the country to Riyadh is governmentally financed by the Saudi Public Investment Fund, which belongs to the Ministry of Finance. The fund provides loans to the Government and, respectively, to the Saudi Railways Company, and is payable back through budget allocations in the future.

The Saudi Landbridge project linking Riyadh to Jeddah had been tendered as DBFO contract with a 50-years operation period. The project is on hold, however, as the private financing has not materialized.

The project of the sea port of King Abdullah Economic City, north of Jeddah, has recently been awarded to a private investor on a BOO basis and is entirely privately owned, financed and operated.

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11. The Syrian Arab Republic

The Lattakiya Sea Port was privatized for operation in 2009 as well as the Tartous Sea Port, which is operated by a company based in the Philippines. The existing rail network is owned and operated by the Syrian Railways corporation, which is Government-owned. The existing network is fully operational and has been upgraded regularly over the last decades, however further rehabilitation and extension is planned.

Two road projects are envisaged, namely the construction of highways on a BOT basis. One project provides a north-south connection on the international road M45, as defined in the ESCWA Agreement on International Roads in the Arab Mashreq, leading from the Syrian Turkish border to the Syrian Jordanian border at a cost of US$1.6 billion with a length of 432 km; and the other project is an east-west connection from the Tartous Sea Port to the Syrian Iraqi border covering a distance of 358 km at an estimated cost of US$600 million. Recently, it was announced that a transaction advisor shall be appointed to help the Ministry of Transport in the Syrian Arab Republic in setting up the legal tasks and prequalification criteria for investors in the project.

The Syrian Government prepared an investment map of such infrastructure transport projects to be financed by the private sector as the Metro Damascus project, which is 16.5 km long and consists of 17 stations; its construction being estimated at US$2.2 million. Another project is the Damascus Ring Road, with 110 km, expected to cost US$400 million. Also on the map is the project for a passenger terminal at Damascus International Airport providing for eight million passengers per year, with an estimated cost of about US$400 million.

Another major project is the Amman-Damascus railway, 145 km long and expected to transfer 2,700 passengers and 6.6 million tons of goods per day. The estimated cost is US$311 million. It will be PPP-funded.

12. The Sudan

With the secession of South Sudan on 9 July 2011, large oil revenue losses and a significant fiscal adjustment are anticipated, but specific magnitudes remain in negotiation. A large part of the fiscal adjustment is expected to fall on the expenditure side. Estimates by the Government of the Sudan show that the long-term fiscal adjustment may need to accommodate a revenue loss as high as 36.5 per cent of total revenues. As a result, the Sudan faces the challenge of balancing fiscal consolidation against the pressing needs for the development agenda. The fiscal authorities will need to do more with less. The extent of the short term impact remains unclear, with possible transition transfers agreed between the two Governments that could provide a gradual shift to the long-term revenue loss.

The authorities are carrying out a number of planning exercises to prepare for this fiscal adjustment, but all are yet to be finalized. A revised budget for the second half of 2011 is expected. The authorities have announced that the amended budget will be based on several options since key negotiation details with the South on oil-sector arrangements have yet to be finalized. As a baseline, the authorities are considering a worst-case assumption for their fiscal plan ahead, which is based on the estimated revenue loss of 36.5 per cent referred to earlier that could be adjusted if final negotiation details would allow more fiscal space. Other key plans include a three-year emergency plan, the so-called salvation programme and a longer-term five-year strategic plan from 2012 to 2016. The authorities have stated that the three-year plan is a key element to smoothen the transition into the new post-secession era as it develops a macro framework to

51 One of two priority routes adopted by the Agreement on International Roads in the Arab Mashreq.
52 See: www.perc.gov.sy.
re-orient the economy from an oil-led to an agriculture sector-led model with the inclusion of appropriate social safety measures.

Before the secession, transport infrastructure in the Sudan was financed by the Government. But, owing to the South Sudan separation and the rich area becoming independent, the Government of the Sudan will have to such new resources to fund the infrastructure projects as the PPP system.

13. United Arab Emirates

Most transport infrastructure projects in the United Arab Emirates are financed by the federal Government, but management and operation are carried out by individual emirates.

With regards to its transport sector, in order to keep pace with the strong growth in other sectors, the Abu Dhabi Department of Transport published the Surface Transport Master Plan (STMP), which anticipates the next wave of urban development and all future growth in various sectors in line with the 2030 plan.

Road congestion extracts a heavy toll on the economy of Abu Dhabi in both urban and rural areas and, as a result, the Government is prioritizing such projects as the widening of the Mafraq-Ghweifat International Highway, which is the corridor from Abu Dhabi to the western border with Saudi Arabia. The Department of Transport hopes that the introduction of the urban public transit system will take a significant number of vehicles off the road in Abu Dhabi mainland.

Other projects include the expansion of Abu Dhabi International Airport and other airports overseen by the Abu Dhabi Airports Company (ADAC). The main airport of the emirate, unlike other major international hubs, has not seen a decrease in passenger traffic over the past few years. The airport expansion also comes during a time in which Etihad Airways, the national airline of the United Arab Emirates, is expanding in order to meet the increasing passenger traffic.

Under the directions of the Abu Dhabi Ports Company (ADPC) and the Department of Transport, the emirate is preparing to shift operations from the main port at Mina Zayed to the massive Khalifa Port in the new industrial area at Taweelah currently under development.

Most recently, in March 2009 to be exact, the federal Government created an inter-emirate transport network, setting in motion a long-discussed plan to connect all seven emirates via rail. The US$3 billion railway project will eventually connect with the larger 1,940 km rail development that aims to connect all six countries of the GCC.

In 2009, the Federal Government established a corporate entity called Union Railway to be responsible for the railway which is part of the GCC Network. The project is envisaged to start in Abu Dhabi City via the industrial area of Ruwais and then connects Al Ain to Oman, while another line will connect Dubai to the north-eastern emirates. According to the strategy of the Union Railway Company, the network might become partially privatized if that is feasible.

The transport sector in Dubai is on the right track as its infrastructure received another boost in 2008-2009 when many of its large projects came into operation. The position of Dubai as an aviation centre seems guaranteed through the expansion of the existing Dubai International Airport (DXB) and the construction of the Al Maktoum International Airport set to become the largest aviation facility worldwide. These efforts come amid the expansion of the fleet of the Emirates airline.

Economic development, however, is adding pressure to the road networks in Dubai; the Government is looking towards public transport solutions. The Roads and Transport Authority (RTA) was created in 2005, charged with enhancing the existing public transport system and offering new solutions to reduce congestion. Dubai Metro, the longest driverless system in the world, is vital to this strategy and is now open and
operating; its operation went to Serco, a private company. Trams will also play a part, with the RTA investing US$1 billion for the construction of a state-of-the-art tram network along the Al Safooh road.

On top of the public transport initiatives, road networks in Dubai are being improved through such ambitious projects as the Sixth Crossing over Dubai Creek, a two-bridge, twelve-lane structure that will extend over 1.7 km and rise to 205 metres at its highest point.

The Government constantly built larger roads, widening some to as many as 16 lanes. These are partly funded by tolls: RTA introduced the Salik electronic road toll collection scheme in July 2007; Dubai Salik four-toll gates with four additional gates opened in September 2008.

Sharjah has been an important trading hub over the centuries. To capitalize on its position, Sharjah has three major ports, namely Khorfakkan on the Gulf of Oman and Khalid and Hamriyah on the Gulf coast. All three are being expanded and upgraded for the future. Most recently, a free trade zone has been set up next to Hamriyah.

Sharjah International Airport is fast emerging as one of the most important airports in the region, served by over 40 airlines flying to 250 destinations worldwide, with passenger numbers in 2007 standing at 4.3 million, a 43 per cent increase from 2006, which is mostly due to the Sharjah-based low-cost carrier Air Arabia. The airline presents increasing growth figures, which allows for future expansion of its fleet.

The Sharjah road system is currently undergoing a massive expansion programme, the aim of which is to ease the congestion problems facing the emirate. However, as the number of drivers in Sharjah seem to keep growing, such projects as the building of another expressway above the Al Wahda Road and the widening of the Emirates Road are not believed to be sufficient, and, to this end, the Government is carrying out a comprehensive study into public transport options.54

14. Yemen

The Government in Yemen has pursued to execute projects as PPP contracts, an example of which is the partnership for management between the Adan Port Authority and Dubai Ports World. The project of development, modernization and management of the National Shipping Company will also be developed by PPP. In addition, there is a significant plan for the management of the Sana’a and Adan International Airports to be operated by the private sector. Another partnership has been concluded between Yemen Airways and Al Saeeda Airlines using PPP.

The execution of the railway network (Aldawli-Alsahily between the cities – Almaaden Line and the connected link with GCC network will be carried out under BOT contract. On 4 December 2006, the Ministry of Transport in Yemen signed an agreement with ESCWA for conducting an economic feasibility study for the construction of a railway network in Yemen (two routes). On 16 February 2009, both parties signed an annex to the Agreement that expands the first study to include two additional railways routes. On 11 December 2009, ESCWA submitted the final report of the study (four routes) to the Ministry of Transport in Yemen for its review and comments.

A national workshop was co-organized by ESCWA and the Ministry of Transport in Yemen (Sana’a, 6 January 2010) for a discussion of the final draft of the study. On 23 January 2010, the Ministry of Transport in Yemen provided ESCWA with its views and comments on the draft report. ESCWA revised the study and submitted the final report for approval on 22 March 2010. In April 2010, the Ministry adopted ESCWA’s report and financing for the implementation of the suggested plan is in preparation.55

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54 See: www.uaetrade-usa.org/home/economic sectors in the UAE/transportation.
III. PROPOSED ACTION PLAN TO INITIATE/ACTIVATE MEASURES TO FINANCE THE IMPLEMENTATION OF SELECTED ITSAM COMPONENTS

A. ACTION PLAN

The Action Plan is an attempt to intensify cooperation with and within the ESCWA region in the field of transport. It comprises a set of seven actions to initiate or activate measures for financing the implementation of selected components of ITSAM. These seven actions are as follows:

**Action 1**: Setting up institutional, legislative and organizational frameworks.

**Action 2**: Preparing economic feasibility studies as basis for financing.

**Action 3**: Contracting for services agreements with qualified transaction advisor firms.

**Action 4**: Setting up a network of transport experts for the exchange of transport data.

**Action 5**: Seeking private contribution for financing of projects in the transport sector.

**Action 6**: Building institutional and organizational capacity for managing transport projects, in particular those with private contribution.

**Action 7**: Establishment of environmental units in ministries and authorities of transport.

B. DETAILS OF THE PROPOSED ACTION PLAN

The seven components of the proposed action plan are to be implemented as detailed below:

**Action 1**

Setting up institutional, legislative and organizational frameworks:

(a) Carrying out a study to evaluate the opportunities and risks for PPPs in the ESCWA region; this study will describe the current situation and highlight the legal possibilities and obstacles. ESCWA will support member countries through technical assistance;

(b) Preparing reports, by every ESCWA country, related to the institutional and legislative status in the transport sector according to the form prepared by the Technical Secretariat of the Action Group for Tailoring the Institutional and Legislative Frameworks of the Transport Sector. ESCWA has established this Action Group on 17 May 2011 with the cooperation of the national transport and trade facilitation committees;

(c) Setting up the terms of reference (TOR) to evaluate the status of the institutional and legislative frameworks in the transport sector. The TOR will be prepared by the ESCWA Action Group for Tailoring the Institutional and Legislative Frameworks of the Transport Sector;

(d) Setting up the mechanism to provide the legal guarantees to encourage retirement funds for investment in the transport infrastructure sector;

(e) Setting up an effective mechanism to give the Government the right of supervision and inspection in PPP contracts;

(f) Formulating contract templates for PPP projects.
Action 2

Preparation of economic feasibility studies as basis for financing:

(a) Preparing the matrix of investment projects strategy of the transport infrastructure sector;

(b) Preparing a pre-feasibility study developing the specifications to a stage where costs and demand can be assessed, providing insight into the role of a project within the strategy and its fundability. This is a significant step before funding the feasibility study which is more costly and time-consuming;

(c) Setting up alternative proposals for projects which were considered of low suitability according to the completed pre-feasibility study;

(d) Preparing the feasibility study for the ITSAM components projects, the results of which will be the basis for a decision on funding through an international financial institution. This study is financed by a Government or donor organization. It is important to consider an environmental study and safety aspects in design, construction and operation;

(e) Preparing the risk assessment and management strategy through preparing the feasibility study, incorporating socio-economic development scenarios;

(f) Preparing a supporting study on the cooperation and integration between the transport models. A prerequisite for successful transport integration are coherent regulatory frameworks that enhance competitive port services and aircrafts, the development of professional road haulage and efficient freight forwarding as well as successful railway reforms. These reforms are part of the ongoing structural adaptation at every country level and at every regional level so as to encourage and facilitate flow of goods and people in ESCWA region.

Action 3

Contracting for services agreements with qualified transaction advisor firms:

The services agreement will assist in the various phases of reviewing, structuring and identifying the specialized technical, legal, environmental and social consultants, prequalification for investors and implementation of the project based on the terms and conditions set out in this agreement.

Action 4

Setting up a network of transport experts for the exchange of transport data:

(a) With ESCWA technical assistance, the main task of a transport expert network is collaborating in regularly assembling, analysing and exchanging transport data;

(b) Maintaining a common database of demand;

(c) Applying geographic information system (GIS) network data and common forecasting scenarios.

Action 5

Seeking private contribution for financing of projects in the transport sector:

(a) Embarking on a strategy to attract PPPs in the transport sector in order to develop its infrastructure and enhance the efficiency and quality of the services provided to residents;

(b) Publishing and announcing the list of projects with a potential to be implemented as PPPs, thereby organizing, for this aim, exhibitions, workshops and conferences, and inviting international financial
institutions, investment banks, financial funds, commercial banks, chambers of commerce, retirement funds, and any other party concerned with financing the transport infrastructure;

(c) Signing memoranda of understanding (MoU) for cooperation in order to provide the funding for technical assistance, between ESCWA and such financing parties as the World Bank, European Investment Bank, Islamic Development Bank, Arab Fund for Economic and Social Development and the Kuwait Fund for Arab Economic Development, among others;

(d) Establishing, within ESCWA, an action group for the follow-up and implementation of the MoU mentioned above, thereby making potential investments bankable.

**Action 6**

Building institutional and organizational capacity for managing transport projects, in particular those with private contribution:

(a) Preparing the training, twinning and exchange programmes aiming at improving institutional capacity;

(b) Organizing seminars and workshops to assist in the organizational reform of transport administrations and upgrading knowledge with the purpose of having the ability to manage the PPP projects.

**Action 7**

Establishment of environmental units in ministries and authorities of transport:

(a) Establishing environmental units in ministries and authorities of transport to enhance the environmental expertise within it;

(b) Preparing a study on strategic environmental assessments and environmental impact assessments for all projects and plans concerning transport, especially with regard to port infrastructure, management and operation. This strategy aims to reduce the pollution levels and promote sustainable use of land and sea. During the preparation of this study, it is important to involve civil societies to encourage and enhance the trust between public and private sectors.

**C. TIMETABLE FOR THE ACTION PLAN TO INITIATE/ACTIVATE MEASURES TO FINANCE THE IMPLEMENTATION OF SELECTED ITSAM COMPONENTS**

The following table shows the timetable for the Action Plan to initiate/activate measures to finance the implementation of selected ITSAM components; the most important dates are set forth below:

<table>
<thead>
<tr>
<th>Action Plan</th>
<th>Date</th>
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<tbody>
<tr>
<td>1. Setting up of institutional, legislative and organizational frameworks</td>
<td>31 March 2013</td>
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<tr>
<td>2. Preparation of economic feasibility studies as basis for financing</td>
<td>31 May 2014</td>
</tr>
<tr>
<td>3. Contracting for services agreements with qualified transaction advisor firms</td>
<td>30 June 2013</td>
</tr>
<tr>
<td>4. Setting up a network of transport experts for the exchange of transport data</td>
<td>31 December 2012</td>
</tr>
<tr>
<td>5. Seeking private contribution for financing projects in the transport sector</td>
<td>31 September 2014</td>
</tr>
<tr>
<td>6. Building institutional and organizational capacity for managing transport projects, in particular those with private contribution</td>
<td>31 December 2012</td>
</tr>
<tr>
<td>7. Establishment of environmental units in ministries and authorities of transport</td>
<td>30 March 2013</td>
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</tbody>
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