

OIC/COMCEC/32-16/D(21)



CCO BRIEF ON TRANSPORT AND COMMUNICATIONS

COMCEC COORDINATION OFFICE November 2016

BRIEF ON TRANSPORT AND COMMUNICATIONS

I. Introduction

Transportation and communications are central to the development of any country and its economy. The increased per capita income and mobility needs of the households, trade globalization, deregulation and privatization trends in transportation infrastructure and services, and the technological progress in vehicle technology have all contributed to the high growth rate of the transportation industry.

Developing transport infrastructure is assessed as a powerful instrument for economic and social development of a country. According to 'Infrastructure to 2030' report, global transport and distribution infrastructure investment needs may exceed USD 11 trillion over 2009-2030 period. In order to effectively plan and implement 10 to 20 years transport infrastructure at the right time and location, countries need to have sound national policy frameworks and ensured funding.

Furthermore, International Transport Forum (ITF) estimates that with regard to the surface transport, worldwide road and rail passenger travel is expected to grow around between 120% and 230% until 2050, whereas this growth is expected to range from 240% to 450% for non-OECD economies. Besides, the global road and rail freight transport is projected to increase between 230% and 420%.

Over the last fifty years, growth in road transport has accounted for virtually all of the growth in landbased transport modes¹. Given its prevalent importance, the road transportation issue has become a crucial agenda item of the COMCEC Transport and Communication Working Group (TCWG). In this respect, the TCWG has dedicated its two consecutive meetings to road maintenance and road safety topics.

II. The Importance of Road Maintenance and Global Trends

Roads are an important public asset; improving the road network can bring about immediate and large benefits by providing better access to hospitals, schools, and markets; improved comfort, speed, and safety; and lower vehicle operating costs. However, sustaining these benefits over time requires maintaining the road network in a timely and proper manner. Delayed maintenance makes roads more difficult to use. This results in increased vehicle operating costs and reluctance by transport operators to use the roads. This in turn reduces the benefits of providing more access to jobs, hospitals, schools, etc., and an overall loss of economic and social development opportunities.

If maintenance is not carried out in a timely manner, entire road sections may fail completely, requiring full reconstruction at a much higher cost than the cost of preventive maintenance. Road authorities need to ensure that the funds allocated to maintenance programs are spent effectively to save future investment costs and to obtain maximum value from these investments. For this purpose, modern road asset-management approach and institutional strengthening of road authorities are becoming increasingly necessary.

International experience suggests that proper maintenance requires:

- Thorough planning and programming of maintenance works,
- Availability of good data to support the setting of priorities,

¹ OECD, Competition Issues in Road Transport, p:9

- An independent, secure, and stable source of funding,
- Appropriate institutional and management structures,
- Monitoring of results of maintenance, and availability of appropriate human resources.

• Road Maintenance in the OIC Member Countries

Different socio-economic indicators and road networks in OIC countries follow very different maintenance regimes and practices; hence, there is a wide range of variation in the state of repair of road networks in the OIC Member Countries (see Annex). The share of road networks that are paved in the OIC countries as a whole is about 53%, while the share of road networks in the US and the EU is 66% and 83%, respectively. The average expenditure on road networks in the OIC is 1,043 million dollars, while average maintenance expenditure is 123 million dollars. Turkey has the highest maintenance expenditure at 797 million dollars, whereas the Gambia has the lowest at 13 million dollars².

Furthermore, in most OIC countries, the composition of road networks comprises secondary, regional or other roads. However, comparing the composition of road networks in the OIC countries as a group to the road networks in the European Union as a whole, it is worth noting the existence of a big difference in these three categories. It is striking to see that a large percentage of the total road networks in OIC countries is motorways and highways.

The OIC Member States, as a group, are investing more in developing motorways and highways and not investing in developing their secondary, regional and other roads. This focus on developing high-quality and high-volume roads requires large amounts of capital. Given the limited resources that are available in many OIC Member States, it is very likely that this focus results in insufficient resources being allocated to maintenance activities.

The share of paved road networks in the OIC countries as a whole is about 53%. The share of paved road networks in the EU is 83%.. When taken together with the previous observation that a large proportion of the road networks in the OIC countries consists of motorways, highways, national or main roads, it can be noted that OIC countries tend to focus much more on motorways, highways, national and main roads than on the other road types. As noted earlier, the road networks in the OIC Member States seem to be unbalanced in terms of their focus on developing high-quality, high-volume roads. This, in turn, is likely to deprive maintenance activities of the resources they need.

Important deficiencies related to the road sector and maintenance practices in the OIC Member States are as followings³;

- There is a lack of reliable and consistent data to support planning and programming,
- The road network in most OIC countries is not in a very good condition,
- Institutional development and practices in the road maintenance sector in OIC Member States are lagging behind international best practices,
- Governance, transparency of operation and public accountability of road maintenance organisations are in need of improvement,
- Capabilities of the construction sector in many OIC Member States need to be upgraded,
- The financing available for maintenance is inadequate,
- The maintenance needs of rural road networks, in particular, need to be given more attention than what they currently receive during the process of planning a budget.

² Enhancing Road Maintenance in the OIC Member Countries, COMCEC

³ Ibid

III. The Importance of Road Safety and Global Trends

Road traffic injuries are a major global publich health problem with severe economic and social consequences. Road traffic injuries adversely affect economic and human development.

Road traffic injuries have remained a neglected issue in the global health agenda for many years, despite being predictable and largely preventable. Furthermore, there is a widespread global recognition that road traffic crashes and injuries represent an unacceptable, and underfunded public health crisis.

Several indicators aim to illustrate the impact of traffic crashes, the most common of which is the number of fatalities and injuries. The World Health Organisation (WHO) estimates that more than 1.2 million people die on the roads every year and up to 50 million people suffer from injuries. The majority of road craches occur on the roads of middle and low income countries. The overall economic costs of road crashes range from 2 to 5 percent of total GDP in many countries.

The WHO report 2015 reveals that annual number of fatalities worldwide seems to have stabilized due to primarily significant improvements in road safety management in high income countries. However, trends in middle and low income countries do not reflect this direction and traffic mortality rates are higher in these countries.

According to the projections, the global traffic fatalities in the various regions of the world will increase 66 percent between 2000 and 2020, while high income countries, as a separate group, were anticipated to show a significant decline in the number of traffic fatalities as indicated in Table⁴ below.

| Middle and Low income countries by World Bank region | Number of countries | Estimated number of fatalities by year (x 1000) | | Percentage change 2000 - 2020 | Fatality rates (death/100000 population) | |
|--|---------------------|---|-------|-------------------------------------|--|------|
| | | 2000 | 2020 | % | 2000 | 2020 |
| South Asia | 7 | 135 | 330 | 143.9 | 10.2 | 18.9 |
| East Asia and Pacific | 15 | 188 | 337 | 79.8 | 10.9 | 16.8 |
| Middle East and North Africa | 13 | 56 | 94 | 67.5 | 19.2 | 22.3 |
| Latin America and Caribbean | 31 | 122 | 180 | 48.1 | 26.1 | 31.0 |
| Europe and Central Asia | 9 | 32 | 38 | 18.2 | 19.0 | 21.2 |
| All Middle and Low income countries | 121 | 613 | 1,124 | 83.3 | 13.3 | 19.0 |
| All High income countries | 35 | 110 | 80 | -27.8 | 11.8 | 7.8 |
| Global average | 156 | 723 | 1,204 | 66.4 | 13.0 | 17.4 |

Table: Predicted road traffic fatalities in low and middle income countries

Source: Kopits, E. & Cropper, M. (2003). Traffic fatalities and economic growth. World Bank Policy Research Working Paper 3035. World Bank Research Board.

⁴ Kopits, E. & Cropper, M. (2003). Traffic fatalities and economic growth. World Bank Policy Research Working Paper 3035. World Bank Research Board.

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The main causes of the road crashes are identified⁶ as follows;

- Limited political will, limited interaction among stakeholders and limited funding,
- Lack of coordination; the absence of an integrated approach,
- Weak legal framework and limited attention for vulnerable road users,
- Underdeveloped road network and poor road conditions,
- Lack of road standards and limited capacity in road management,
- Old age of vehicles and low quality drivers,
- Limited road safety awareness (speeding, helmets, alcohol, seat belts, child restraints),
- Limited effective road safety education,
- Ad hoc enforcement aimed at income generation vs safety,
- Low quality crash data and no crash management system,
- Poor control checks and balances.

According to the Swedish International Development Agency (SIDA 2006), investment in road safety usually leads to substantial net economic gains. In the high-income countries generally, road safety actions yield economic returns ranging from 9 to 22 percent while in the low and middle income countries this rate is estimated to be very high.

Over the past four or more decades, many regional and global road safety initiatives have been launched. To illustrate, in 2010 a United Nations General Assembly resolution proclaimed a Decade of Action for Road Safety (2011–2020). This Decade was launched in May 2011 in more than 110 countries, with the aim of saving 5 million lives by improving the safety of roads and vehicles; enhancing the behaviour of road users; and improving emergency services. Moreover, the newly adopted 2030 Agenda for Sustainable Development has set an ambitious road safety target of globally preventing the occurrence of deaths and injuries resulting from road traffic crashes by 2020.

• Road Safety in the OIC Member Countries

The OIC Member countries show great diversity in terms of road safety. The statistics of the WHO shows that low income countries account for 12% of the world population, 1% of registered vehicles and 16% of road deaths. On the other hand, middle income countries account for 70% of the world population, 53% of registered vehicles and 74% traffic fatalities. Being low and middle income countries, vehicle ownership rates in OIC Member Countries are generally low whereas the traffic mortality rate (number of fatalities per million population) is relatively higher than in western countries.⁷

The major challenges faced by OIC member countries related to the road safety issue are:

- Lack of appropriate and enforced legislation as well as national strategy for road safety,
- Lack of crash investigation and post crash management,
- Lack of adequate funding for road safety,
- Lack of appropriate resources (such as organizational and human capacity),
- Inadequacy of driver training,
- Inconsistency of road and traffic engineering.

II. Transport and Communications Cooperation under the COMCEC

Improving the functioning, effectiveness and sustainability of transport and communications in the Member States is the strategic objective of COMCEC Strategy in the field of transport and communications. To this end, COMCEC focuses on important transport and communications issues in order to produce knowledge and create a common understanding as well as approximate policies

⁶ Improving Road Safety in the OIC Member Countries, COMCEC Coordination Office, 2016

⁷ Ibid

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among the Member Countries. Within this framework, COMCEC Transport and Communications Working Group (TCWG) devoted its two consecutive meetings to road maintenance and road safety issues.

• Seventh Meeting of the Transport and Communications Working Group

After the 31st Session of the COMCEC, the TCWG held two important meetings in the field of road transportation. The Seventh Meeting of TCWG was held on 24th of March 2016 in Ankara, Turkey with the theme of "Enhancing Road Maintenance in the OIC Member Countries". In an attempt to provide inputs for discussions during the meeting, the COMCEC Coordination Office (CCO) commissioned the research report on the same subject of the meeting "Enhancing Road Maintenance in the OIC Member Countries". During the meeting, the representatives of the Member States shared their views, experiences, achievements and challenges in the field of road maintenance in their respective countries. Additionally, the issue of policies that can be implemented to enhance the quality of services provided in this field was discussed. The discussions were also enriched by presentations from the Member States and international organizations.

As the main output of the meeting, some important political recommendations were underscored as

follows;

- Developing a National Road Maintenance Strategy Based on Evidence and Data.
- Ensuring the Allocation of Adequate and Sustainable Funding for Road Maintenance and Increasing Effective Utilization of Available Road Funds through a Sound Legal Framework and Institutional Structure.
- Making Use of Performance-Based Contracts in Road Maintenance.
- Establishing a Road Database Management System.

• Eighth Meeting of the Transport and Communications Working Group

The Eighth Meeting of TCWG was held on 27th of October 2016 in Ankara with the theme of "Improving Road Safety in OIC Member Countries". In a similar manner with the previous Meeting, the CCO provided the Meeting with two studies: "Improving Road Safety in OIC Member States" and "COMCEC Transport and Communications Outlook 2016" as a basis for discussions. During the meeting, the delegates of the Member States shared their views, experiences, achievements and challenges in terms of road safety in their respective countries. The issue of policies that can be implemented to improve road safety services was discussed. The discussions were also enriched by presentations from the Member States, international organizations and NGOs.

As the main output of the meeting, some important political recommendations were underscored as

follows;

- Raising Awareness of Road Safety in the Member States,
- Adhering to the Major UN Road Safety Agreements and Adapting the Safe Systems Approach for National Road Safety Management System,
- Establishing a Reliable and Sustainable Road Safety and Crash Data System,
- Developing a National Road Safety Strategy and Assigning a National Lead Agency/Institution Responsible for Road Safety Management.

The Working Group will hold its ninth meeting in Ankara, on 16th of March 2017 with the theme of "Increasing Broadband Internet Penetration in OIC Member Countries".

<u>COMCEC Project Funding Mechanism</u>

Through its second implementation instrument, the Project Funding Mechanism, the CCO provides grants to the selected projects proposed by the Member States that have already registered to the Transport and Communications Working Group. In 2015, the Republic of Turkey, together with Morocco, Iran and Indonesia, implemented the project entitled "Measuring and Benckmarking of PMPI (Passenger Movement Performance Index) among the OIC countries".

Within the framework of the third project call announced in September 2015, one project in the field of transport and communications was found eligible for funding. In this respect, the Republic of Turkey, together with its project partners; Tunusia, Mozambique, Indonesia, Malaysia, have been implementing the project entitled "Assessment and Enhancement of Air Cargo Interconnectivity among the OIC Member States: the Air Cargo Co-modality Approach (ACCMA) to Facilitate Intra-OIC Trade".

The fourth project call was made in September 2016 and 5 projects have been shortlisted for funding.

Annex

| Socio-economic | and Road | Network | Indicators | of OIC Member | Countries |
|----------------|----------|---------|------------|---------------|-----------|
| | | | | | |

| Indicator | Min | Max | Average | Min | Max |
|---|---------|-------------|------------|--------------|--------------|
| Population | 345,023 | 249,865,631 | 28,922,429 | Maldives | Indonesia |
| GNI per capita (\$) | 400 | 86,790 | 5,676 | Niger | Qatar |
| Surface (Km ²) | 300 | 2,724,900 | 558,830 | Maldives | Kazakhstan |
| Motorways (Km) | 0 | 3,891 | 590 | Albania | Saudi Arabia |
| Highways, main or national roads (Km) | 0 | 38,570 | 11,534 | Suriname | Indonesia |
| Secondary or regional roads (Km) | 0 | 113,451 | 21,505 | Togo | Egypt |
| Other roads (Km) | 0 | 415,788 | 69,807 | Suriname | Indonesia |
| Total length of roads (Km) | 88 | 508,000 | 68,227 | Maldives | Indonesia |
| Paved roads (%) | 1 | 100 | 52 | Chad | Jordan |
| Paved roads (Km) | 88 | 355,220 | 35,740 | Maldives | Turkey |
| Non-paved roads (Km) | 0 | 220,074 | 31,423 | Jordan | Indonesia |
| Length of roads by GDP per capita (Km/\$) | 0.03 | 300 | 49 | Maldives | Uganda |
| Density of roads (Km/Km ²) | 0.005 | 5.6 | 0.32 | Sudan | Bahrain |
| Traffic volume (Mio Veh-Km) | 74 | 115,752 | 30,779 | Gambia | Mozambique |
| Inland freight transport (MioT-Km) | 5 | 344,779 | 105,023 | Mali | Kazakhstan |
| Inland passenger transport (MioP-Km) | 16 | 343,384 | 128,758 | Gambia | Pakistan |
| Road freight transport (MioT-Km) | 4 | 224,048 | 63,737 | Mali | Turkey |
| Road passenger transport (MioP-Km) | 16 | 322,765 | 122,394 | Gambia | Pakistan |
| Persons Killed / 100,000 population | 1 | 37 | 10 | Burkina Faso | Lybia |
| Persons Injured /100,000 population | 1 | 384 | 99 | Bangladesh | Iran |
| Injury accidents /100,000 population | 1 | 316 | 80 | Bangladesh | Iran |
| Injury accidents / 100 million Veh-Km | 13 | 1,693 | 471 | Azerbaijan | Kazakhstan |
| Central Government expenditures (Mio USD) | 1 | 6,582 | 756 | Sierra Leone | Turkey |
| Regional/Local Government expenditures (Mio USD) | 46 | 185 | 116 | Tunisia | Morocco |
| Private sector expenditures (MioUSD) | 135 | 135 | 135 | Azerbaijan | Azerbaijan |
| Total expenditures (MioUSD) | 1 | 6,582 | 959 | Sierra Leone | Turkey |
| Investment expenditures (MioUSD) | 1 | 5,785 | 623 | M alay sia | Turkey |
| Maintenance expenditures (MioUSD) | 0.13 | 797 | 130 | Gambia | Turkey |
| Other expenditures (Mio USD) | 0.02 | 66 | 17 | Egypt | Saudi Arabia |
| Road Indirect Revenues: Fuel Tax (Mio USD) | 1 | 178 | 83 | Egypt | Kazakhstan |
| Road Direct Revenues: Toll (MioUSD) | 2 | 450 | 131 | Guyana | Turkey |
| Others Road Revenues (MioUSD) | 0 | 101 | 50 | Guyana | Mozambique |
| Total Revenues (Mio USD) | 48 | 450 | 218 | Guyana | Turkey |

Source: Enhancing Road Maintenance in the OIC Member Countries, COMCEC
