



**Standing Committee
for Economic and Commercial Cooperation
of the Organization of Islamic Cooperation (COMCEC)**

**Proceedings of the 7th Meeting of the
COMCEC Transport and Communications Working Group**

**“ENHANCING ROAD MAINTENANCE IN THE OIC
MEMBER COUNTRIES”**



**COMCEC COORDINATION OFFICE
March 2016**



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PROCEEDINGS OF THE 7TH MEETING OF THE
COMCEC TRANSPORT AND COMMUNICATIONS WORKING GROUP
ON

“ENHANCING ROAD MAINTENANCE IN THE OIC MEMBER COUNTRIES”

(March 24th, 2016, Ankara, Turkey)

**COMCEC COORDINATION OFFICE
March 2016**

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Introduction

The Seventh Meeting of the COMCEC Transport and Communications Working Group was held on March 24th, 2016 in Ankara, Turkey with the theme of “Enhancing Road Maintenance in the OIC Member Countries”. The Meeting was attended by the representatives of 15 Member States, which have notified their focal points for the Transport and Communications Working Group namely, Gabon, The Gambia, Guinea, Indonesia, Iran, Jordan, Kuwait, Morocco, Qatar, Palestine, Saudi Arabia, Tunisia, Turkey, Uganda and Uzbekistan. Representatives of the Islamic Development Bank (IDB), SESRIC, International Road Federation (IRF), and ECORYS have also attended the Meeting.¹

The Meeting has considered two Studies. The first one was the Research Report entitled “Enhancing Road Maintenance in the OIC Member Countries” commissioned by the CCO which aims at describing and assessing the state of affairs of road maintenance in the OIC Member States and provides policy recommendations for improving the quality of road maintenance services. The second one was “COMCEC Transport Outlook 2015” prepared by the CCO which provides a general overview of transport sector in the Member States.

During the meeting, the representatives of the Member States have shared their experiences, achievements, and challenges in the field of road maintenance in their respective countries. Additionally, policies that can be implemented to improve the quality of services provided in this field were discussed. The discussions were also enriched by the presentations from the international organization representatives.

¹ The list of participants is attached as Annex 4.

1. Opening Remarks

The Meeting started with a recitation from the Holy Quran. At the outset, Mr. Mehmet Metin EKER, Director General of the COMCEC Coordination Office, briefly introduced the COMCEC and its activities undertaken to further the cooperation among the member states.

Mr. EKER expressed that modern transportation systems increasingly rely on roads and road transportation. Within this framework the road system must accommodate ever-growing traffic volumes, both of passengers and freight, under more demanding conditions to meet year-round needs, regardless of climate and location.

Mr. EKER expressed that as road system ages; there is a greater need for road maintenance. As a consequence, the share of road maintenance expenditures in national road budgets should increase over time and to be spent wisely, effectively, transparently and getting the most value out of it. Road authorities must 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.

Mr. EKER continued his speech with expressing the major challenges faced by the OIC Member Countries in terms of road maintenance, which are specifically lack of adequate funding for road maintenance, lack of appropriate and enforced legislation as well as national strategy for road maintenance, lack of appropriate resources (such as organizational and human capacity), and inconsistency of procurement approaches to the available resources.

After introducing the Research Report titled “Enhancing Road Maintenance in the OIC Member Countries”, Mr. EKER outlined the general policy recommendations of the Report intended for overcoming these challenges in the OIC Member Countries, which are specifically developing a national strategy in terms of road maintenance, establishment of a responsible authority and determination of a special fund for road maintenance, improving human and financial resources, improving the capabilities of the road sector, and a programme for engaging the road sector contractors, and establishment of performance monitoring system. He expressed that participants will have the opportunity to discuss all these issues for coming up with some policy recommendations in this regard.

Lastly, Mr. EKER introduced the program of the Meeting and expressed his wishes for successful deliberations.

Mr. Naim HASSAN, Development and Planning Director, Ministry of Transport of Jordan, was elected as the chairman of the meeting. Mr. HASSAN welcomed the participants and expressed his thanks to attendants for electing him as the chairman. He also expressed his gratitude to the CCO for their efforts to organize such important working group meetings.

2. The COMCEC Transport Outlook 2015

Mr. Ekrem KARADEMİR, Senior Transport Specialist at the COMCEC Coordination Office, presented some of the key findings of the COMCEC Transport Outlook 2015. Mr. KARADEMİR focused on the recent trends and main characteristics of the transport sector in the OIC Member Countries.

At the outset of his presentation, Mr. KARADEMİR emphasized the relationship between transport, logistics, and trade and how they affect each other. In this regard, he stated that although the responsiveness of trade to GDP growth may have moderated over recent years, demand for maritime transport services and seaborne trade volumes continue to be shaped by global economic growth and the need to carry merchandise trade.

Mr. KARADEMİR continued with some indices with regard to the international trade, such as, Logistics Performance Index (LPI), Liner Shipping Connectivity Index (LSCI), burden of custom procedures, and Quality of Transport Infrastructure. He emphasized that the OIC countries with higher LPI scores tend to engage more in international goods trade. Countries with high LPI scores are more likely to gain competitive advantage over those with lower LPI scores as they can facilitate their international trade through their enhanced logistics infrastructure and services. With regard to the LPI scores, Malaysia, United Arab Emirates, Qatar, and Turkey come on top of the rankings; while Somalia, Afghanistan, and Djibouti come at the bottom.

Mr. KARADEMİR continued his presentation with demonstrating some traffic figures. In the OIC-MENA region UAE, Turkey, and Egypt were the top performers regarding container throughput. For the OIC-Asia region, most of the traffic was handled by a few countries such as Malaysia and Indonesia. With regard to rail passengers, Egypt and Iran from the OIC-MENA region and Pakistan, Indonesia, and Kazakhstan from the OIC-Asia are the leading member states. Rail freight carried in the OIC-Asia region, which predominantly belongs to Kazakhstan, is far above other regions in 2012. In the OIC-MENA region, Iran and Turkey together carried more than two-thirds of region's rail freight. Regarding air freight traffic, there is a striking boom of in the OIC-MENA region since 2008, which mostly originated from the United Arab Emirates.

Mr. KARADEMİR went further by highlighting significance of Private Sector Participation (PSP) in transport sector. Then he enumerated the general requirements of successful implementation of a PPP project as follows;

1. Political and economic stability
2. Sound legal framework
3. Institutional capacity
4. Political commitment and support

5. Transparent and competitive tender procedures free from corruption
6. Organized and developed domestic private entrepreneurship (including financial institutions and construction companies)
7. Public acceptance and support

Lastly, Mr. KARADEMİR outlined environmental impacts of transport in the OIC member countries. Underlining the great diversification in transport sector among the member countries, he emphasized that the OIC countries should abstain from adopting “one size fits all” type of policies and strategies. Nevertheless, there is a considerable potential for cooperation in the transport industry, and member countries should develop a holistic view that promotes intermodal transport. Mr. KARADEMİR concluded his presentation by emphasizing the factors required for the development of the transport sector in the member countries.

Question(s): The representative of Turkey raised a question with related to the quality of transport infrastructure. He asked whether there are any figures comparing the OIC member countries with the world developed countries in terms of quality of transport infrastructure.

Answer (s): Mr. KARADEMİR responded that as it has been emphasized in the presentation the world average of the quality of transport infrastructure is above the OIC average. Only from this information it can be inferred that the rate of the quality of transport infrastructure of developed countries is highly above the OIC member countries.

Question(s): The representative of Gabon asked that is there any initiative under the COMCEC with related to the maintenance of the road connection between Gabon, Cameroon and Chad, which is considered as a very strategic connection for the Central Africa? As a second question the representative asked what is the role of railways in increasing connection in the Central Africa?

Answer (s): Regarding the first question Mr. KARADEMİR outlined that as an international cooperation platform, COMCEC produce and share knowledge which pave the way for policy making and policy implementation in the member countries. This meeting is a reflection of this tradition and is an important attempt to divert perspectives to the significance of the road maintenance issue in the member countries. Concerning the second question Mr. KARADEMİR said that the countries which have good connectivity at the same time they have better railway connectivity. Railway should always be considered with the ports because ports are strategic points for the development of railways when freight transport is in question.

3. Conceptual Framework of Road Maintenance and the Global Trends

Dr. Adnan Rahman from the International Road Federation-Geneva, gave a presentation outlining a conceptual framework for road maintenance and described the current trends in the field of road maintenance. The focus of his presentation was on the non-engineering aspects of road maintenance, namely the policy, institutional, and financial aspects concerning road maintenance.

The presentation was divided into three parts: 1) an introductory part explaining why it is important to carry out timely and proper maintenance of the road network, and what is road maintenance, 2) a section outlining a framework for road maintenance, and 3) a section summarizing what could be learnt from international experience in the field of road maintenance.

It was pointed out that roads are important because they make the country accessible and provide the population with access to markets, jobs, healthcare, and education. This, in turn, drives economic growth. Roads are important in order to promote trade as well as development. For example, roads linking the areas where minerals and other raw materials are produced to ports provide access to world markets. Without roads linking villages and small cities to hospitals, schools, jobs, and local markets, the people living in these villages would not have access to healthcare, education and a productive livelihood. Thus, roads should be seen as more than just a means for transport, but rather as an instrument for the development of the country.

Dr. Rahman emphasized that given the importance of roads, it is important that a country's road network be properly maintained; if the road network, or a large part thereof, is in a poor condition, the benefits from good accessibility will be lost. Thus, maintaining the road network is important in order to realize the benefits from investing in the development of the road network. In addition, poorly maintained roads means higher vehicle operating costs, longer travel times from A to B, more accidents, and a loss in the value of the original investment. Finally, if maintenance is not carried out in a timely manner, the cost of carrying out the required maintenance at some future date is unnecessarily high. Thus, proper and timely maintenance of roads is required to realize the benefits, avoid unnecessary expenditures, and avoid additional costs and inconvenience to road users.

Unfortunately, despite the advantages of having well maintained road networks, maintenance is often deferred. This results in what is called a maintenance gap. More specifically, the maintenance gap is the difference in the expenditures that are required to maintain the road network in a "good" condition versus actual expenditures on maintaining the road network. The larger the maintenance gap, the poorer the condition of the road network, and the larger the expense required at some future date to improve the condition of the road network.

Moreover, Dr. Rahman highlighted that maintenance is a series of activities designed to keep a road network serviceable by reducing the deterioration of pavements and other road assets. There are several different types of maintenance, namely: 1) routine maintenance, 2) resurfacing, 3) rehabilitation, 4) reconstruction, 5) restoration, 6) betterment, and 7) new construction. The presentation focused on what is typically called preventive maintenance and this usually includes the first three types of maintenance activities (routine maintenance, resurfacing and rehabilitation).

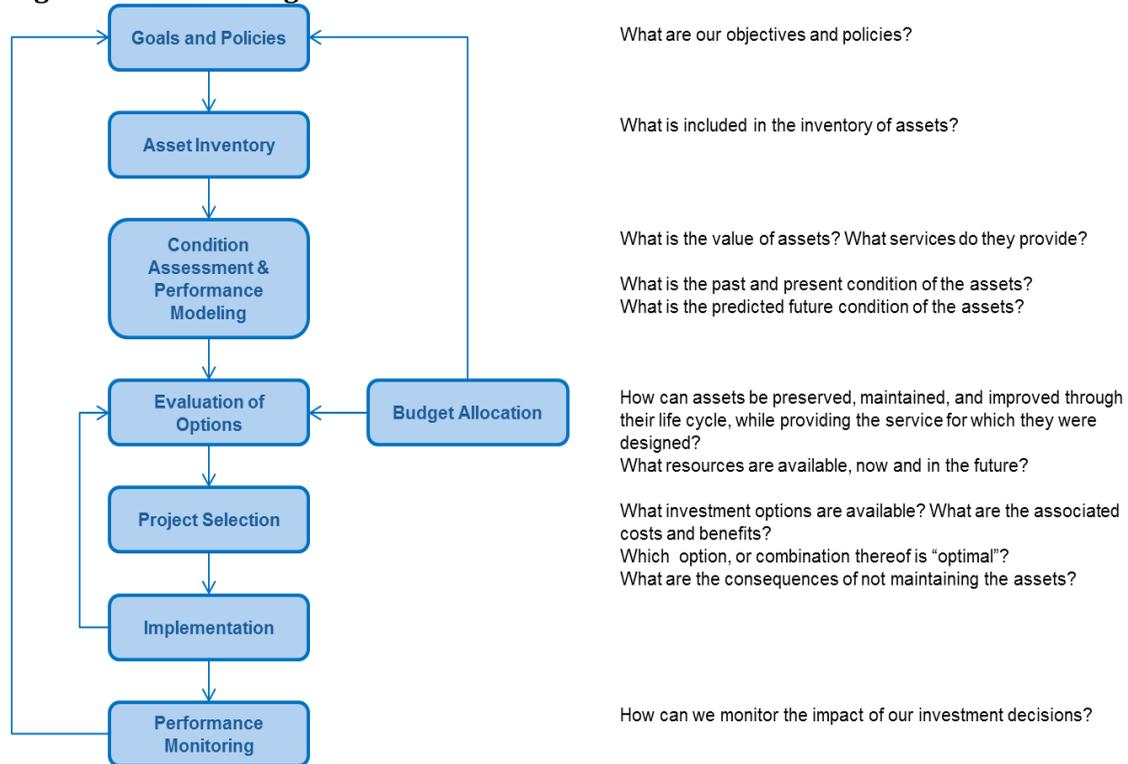
The framework for road maintenance defined four functions for organisations managing road networks, namely: 1) strategic planning, 2) programming, 3) preparation (of projects), and 4) implementation (see Figure 1). For each of these four functions the following common steps were identified as part of the decision-making cycle: 1) defining goals and objectives, 2) carrying out a needs assessment, 3) defining options to meet these needs, 4) analysing the costs and benefits of each of the identified options and selecting the most preferred option, 5) implementing the options, and 6) monitoring the performance of each option. These four functions and the decision-making cycle are combined together in a framework for asset management. (See Figure 2)

Figure 1 - Four Functions for an Organisation Managing Road Networks

STRATEGIC PLANNING	Involves analysing the road network and preparing a long-term strategic plan that includes future needs in terms of, for example, maintenance needs, the resource requirements for different future budgetary and economic scenarios
PROGRAMMING	Involves developing a multi-year program of work and associated expenditures. This work program identifies future maintenance needs of the road network, and prioritises these needs based on costs and benefits and available budgets.
PREPARATION	Involves developing the details for implementing the multi-year program of work – detailed designs and cost estimates are prepared.
IMPLEMENTATION	Covers the management of daily on-going works activities of the organisation on a daily or weekly basis. This includes, for example, the scheduling of work, monitoring of the work, and evaluation of completed works.

Source: Consultant

Figure 2 - Asset Management Framework



Source: Consultant

In the final part of the presentation, Dr. Rahman focused on what could be learned from international experience and grouped the lessons that could be learnt into four groups, lessons regarding: 1) ownership and institutional structure, 2) financing, 3) assigning of responsibility, and 4) enhancing efficiency. The lessons for each of these categories are provided below.

Ownership and Institutional Structure

- Involve stakeholders and road users in management of roads by creating an organisation (e.g., a road board) that:
 - Is independent
 - Has legal and legislative standing
 - Has clearly defined executive or advisory responsibility
 - Has a clear terms of reference
 - With explicit rules and procedures
 - Separate financing and procurement and delivery functions
 - Institutionalise planning and programming function

Financing

- Create an independent (free from political interference) organisation (e.g., road fund):
 - With dedicated revenue sources deposited directly to it,
 - An independent board with a clear ToR ,
 - The ability to vary tariffs and charges to meet needs,
 - With a simple consistent procedure for fund allocating, and
 - Is regularly audited
 - Revenues should come from user charges (fuel fees, parking, vehicle license fees, road pricing, weight-distance fees, ...)
 - Administrative considerations (evasion, international transit fees, inadvertent subsidies, ...)
 - Practical considerations.
- Level of charges should follow three core principles:
 - Road tariff should not be lower than the variable costs of operating and maintaining the road network,
 - Road tariff and the taxes and charges used to support local access roads should collectively cover all road costs,
 - When there is significant road congestion, the road tariff should also include congestion costs, although this will only apply to a handful of seriously congested cities.

Assigning Responsibility

- Clear assignment of responsibility, based on a functional classification of road network, for its management,
- Management includes responsibility for managing traffic and enforcing, for example, weight-axle rules and regulations,
- Community and rural roads need special attention, including financing from the central/national government.

Enhancing Efficiency

- Clear definition of the role of the road agency in a mission or vision statement,
- Management Structure: decentralization,
- Management must understand of asset management,
- Create positions with asset management responsibility,
- Training of managers in asset management,
- Working with the sector to improve skills and competences to permit more complex forms of contracting (e.g., performance based maintenance contracts),
- Fewer staff, better terms and conditions for employment,
- Use Management Information Systems (MIS) to support decision making,

- Asset Management System with an up-to-date asset registers,
- Condition of assets,
- Traffic information,
- Regular data collection to support planning and programming,
- Use life cycle costing approaches to set,
- Use of models (transport demand models, pavement deterioration model, financial models),
- Program delivery,
- Renew and adapt business models for maintenance – lump sum contracts, with focus on outcomes,
- Outsource delivery of maintenance works,
- Simple, consistent, transparent procurement practices and contracts,
- Program audits and monitoring are built into program delivery,
- Strengthen managerial accountability,
- Audits,
- Reporting requirements,
- Change financial accounting systems,
- Match revenues to expenditures,
- Account for asset owned by road agency,
- Change financial accounting systems,
- Match revenues to expenditures,
- Account for asset owned by road agency,
- Record value of road assets,
- Generate information to support decision making and priority setting.

Question(s): With regards to the road fund, the COMCEC Coordination Office asked that what kind of road fund would be most effective for road maintenance? Is it better to have a road fund which is to be used for the whole road issues such as road construction, rehabilitation, etc. or have a special fund to be used for only the road maintenance?

Answer (s): Dr. Rahman responded that there is not “one size fits all” approach to this issue and it depends on how the financing of the road sector works in the given country. Let’s say new construction is financed from the capital account. In this example creating a strong road fund which has a focus solely on maintenance is much better.

Comment (s): The delegate of Morocco underlined the importance of adopting asset management practices in road maintenance and stressing that the road authorities should have private business like model in terms of asset management.

Question(s): The representative of Turkey asked that what is the best option for a country concerning the asset management? Is it better to develop its asset management by its own or to take best practices from the other countries?

Answer (s): With regard to asset management Dr. Rahman expressed that the asset management system should be considered as broader as its traditional definition. The asset management system should be linked not only with the condition of asset and traffic but also with the current financial system in order to measure fund to be used for the road maintenance. At this point Dr. Rahman gave a specific example from USA and how they conduct asset management in their countries. He also stated that the special condition of a country is one of the main determinant factors in choosing the type of asset management system.

4. Evaluation of Road Maintenance in the OIC Member and Review of the Case Studies

In his second presentation, Dr. Rahman presented the results of the review of maintenance in OIC Member States, and from the three case studies covering Morocco, Turkey, and Senegal. The presentation concluded by drawing providing conclusions and making recommendations regarding how OIC Member States could do to improve the state of road maintenance in their respective countries.

The presentation started by reviewing three indicators: 1) the length of the road network by type of road, 2) the lengths of paved and unpaved road networks, and 3) the length of the road network by USD 10 Million GDP of the country. These indicators for the OIC Member States were compared with the same indicators for the United States of America and the 28 European Union countries. For the OIC Member States as a group, almost 12.5% of their total road network is a highway or a motorway compared to 1.4% and 6% for the United States and the EU, respectively. The second significant observation was that the length of road network relative to a country's GDP is higher in 32 of the OIC Member States than it is in the EU, and in 42 countries it is higher than it is in the United States.

For the 8 Sub-Saharan OIC Member States for which data on the condition of the road networks and expenditures on maintenance were available, it is clear that less than half of the road networks in these countries are in good condition. Also, the expenditures on maintenance are small compared to the capital investments.

Based on this review, the presentation concluded that road network are too large relative to the GDP of most OIC Member States, the share of motorways, highways, national and main roads in the total road network seems too large, there is an acute lack of reliable and consistent data when it comes to expenditures in the road sector (this data is not readily

available), there seems to be a capital investment bias with most expenditures on rehabilitation and capital projects, and the road network of OIC Member States are not in very good condition.

In terms of the issues facing the sector, the major issues facing the sector were divided into four categories, namely issues related: 1) institutional and organisational structure, 2) financing, 3) assigning of responsibility, and 4) enhancing efficiency.

With regards to organisational and institutional structure, the single biggest issue is the lack of ability for the organisation responsible for road maintenance to make independent decisions, the combining of functions related to maintenance planning, programming, and procurement with the execution of maintenance works, the lack of genuine stakeholder involvement, and the lack of serious planning and programming function within these organisations.

Dr. Rahman emphasized that with regards to the financing, in most countries the availability of resources for financing road maintenance is inadequate compared to the need and the flow of resources is volatile changing, often changing by large amounts from one year to the next. Furthermore, only 20 OIC Member States have a road fund for funding road maintenance. However, even when these funds exist, they are often inadequately resourced and rarely independent. The primary source of revenues, for financing road maintenance, is levies on fuels, and a transfer from general tax revenues.

With regards to the responsibility for road maintenance, the responsibility for maintaining the rural road network is mostly unclear, and the responsibility for enforcing rules and regulations (especially the axle-weight restrictions) is unclear, or not properly carried out.

With regards to the efficiency, the planning and programming functions are inadequate, there is little data to support the use of asset management systems and models, performance based contracts remain the rule rather than the norm, and there are few attempts to relate the costs and benefits from carrying out various maintenance works.

The conclusions of the review of maintenance in OIC Member States and the three case studies, covering Morocco, Turkey, and Senegal can be summarised as follows:

- Preventive maintenance pays for itself (deferring maintenance can be very expensive)
- Maintenance should not be seen just as maintenance, but as part of a multi-year asset management plan,
- Planning and programming are essential components for any successful maintenance strategy,
- Plans, programs, and actions must be based on solid data and evidence linking condition of assets, costs, and benefits of alternative maintenance,
- Separate the management and operation of the road network from the funding of the maintenance works,
- Earmarked, stable sources of revenue are required for having effective implementation of multi-year maintenance plans,

- Use of innovative financing sources to meet the funding needed for maintaining the road network is needed,
- Focus of the road fund's activities should be on preventive maintenance,
- Dialogue with industry is necessary to understand the problems faced by industry, as well as to improve the capabilities of the sector.

Dr. Rahman continued his presentation with grouping the recommendations for the OIC Member States into two categories. The first category included recommendations (system recommendations) that are applicable to all organisations responsible for maintaining road networks. Each organisation can determine for itself which of these recommendations apply to it and implement them. The second set of recommendations is linked to the stage of development of an organisations and its maturity and are divided into four phases.

The system recommendations include the following:

- Use of performance indicators for decision-making,
- Data collection,
- Financial Management Systems,
- Road Information System and Asset Management System,
- Project Management System,
- Risk Management Framework.

The second set of recommendations linked to the stage of development of the responsible organisation includes the following four phases:

1. Taking stock and setting the stage,
2. Addressing institutional and financing issues,
3. Using performance based maintenance contracts, and
4. Implementing organisation wide performance management.

In Phase 1, it is recommended that the responsible organisation use performance indicators for decision making, collect all needed data to support planning and programming of maintenance activities, put in place financial management systems that allow it to estimate the costs of individual maintenance works, implement a road and asset management system, a project management system, and a risk management framework. In Phase 2, the responsible organisation should address the human resource issues it faces (for example, having the right sets of terms and conditions to be able to attract the right talent, skills and competences), involve stakeholders in decisions related to the management of the road networks, and ensure the financial security for the organisation. In phase 3, the responsible organisation should focus on using performance based maintenance contracts, focusing on outcomes and not merely outputs. Finally, in Phase 4, the responsible organisation should focus on implementing and organisation wide performance management system linking the performance of all parts of the organisation to both outputs and outcomes.

Comment (s): The delegate of Morocco made some remarks on the presentation regarding the Morocco case. Additionally, he emphasized that more than half of the road network of Morocco is old. That's why it is important to outsource the routine maintenance as well as periodic maintenance. Many road administrations in the world face the same problem. He also expressed that Morocco has extended the rural roads too much during the 20 years and today they face the issue of the maintaining these rural roads as well.

Question(s): The COMCEC Coordination Office asked that is it really vital to have an autonomus road authority spesifically in charge of road maintenance?

Answer (s): Dr. Rahman responded that authonomy of decision making is vital for a couple of reasons. Fistly, setting priorities for deciding which maintenance needs to be addressed first is a technical question more than political question. Secondly, if there is not an authonomy then there will be some conflicts between capital investment and capital investment gains since capital investment creates new assets. Dr. Rahman also emphasized that the legal basis for the existence of the authonomy and guarantting the financial resource to deliver its services is very important.

5. Member States' Presentations

a. Gambia

Mr. Chernon Lamin Jallow, a Project Engineer with the National Roads Authority of The Gambia gave a brief presentation on the current road infrastructure and maintenance challenges faced by The Gambia. He began his presentation with an overview of the Gambia's country profile. Then followed by discussing how the institutional responsibilities are assigned to the various players in the road transport sector. He stated that the Ministry of Transport, Works and Infrastructure is responsible for overall policy formation and oversight while the National Roads Authority administers, controls the construction and maintenance of the road network in The Gambia.

Mr. Jallow outlined the key social indicators of his country and in particular highlighted the huge gap between the nominal GDP per capita and the overall length of the road network. He continued the presentation by detailing the Road profile throughout the Country. He stated that The Gambia has a total road network of about 3920km out of which 818km forms the primary road network of the country. He went on to further highlight that only 21% of the total road network is paved. However, 79.3% of the primary road network is in good condition.

Furthermore, Mr. Jallow expressed the current maintenance needs of The Gambia and the funding gap that exists despite the existence of a road fund. The Table below is an extract from his presentation underlining the current funding situation of road maintenance in The Gambia.

Year	Estimated Needs	Approved Budget	Govt Actual Sub	Financing Gap	Gap/Need (%)
2006-2007	200	60.00	17.51	182.49	91.2
2008	250	80	32.7	217.30	86.9
2009	300	60	64.4	235.6	78.5
2010	275	100	57.0	218.00	79.3
2011	200	100	76.00	124.00	62.0
2012	363	100	77.00	286	78.8
2013	310	120	73.46	236.54	76.3
2014	335	121	185	150	44.8

As presented in the Table above, Mr. Jallow expressed his concerns over the lack of sufficient funds to cover the cost of road maintenance in The Gambia. He further stated that the subvention provided by the Government from the budget over the years has consistently met only 30% of the maintenance needs thus resulting in a huge backlog of periodic maintenance. He then explored a host of other challenges faced by the National Roads Authority in implementing its mandate as highlighted in the following points:

- Dependence of government on tax revenues: The key challenge to the road sector is the need to formulate a sustainable mode of financing to ensure timely maintenance interventions (fuel levy, road tax, vehicle license, etc.)
- Overloading of trucks – Almost 40% of the trucks on roads exceed the National weight limits: The need to set-up an efficient axle load control mechanism is critical to prevent premature failure of the road pavement.
- Availability of local materials: Road Construction Materials are unavailable locally and hence are very expensive to import.
- Inadequacy of road maintenance contractors.
- Lack of a Pavement management system – There is little by way of up-to-date data to support a systematic assessment of the maintenance needs of the road network.

Mr. Jallow concluded the presentation with a strategy to address the above mentioned challenges as summarized in the following points:

- Financial sustainability requires long-term donor engagement. Domestic resources have been insufficient for the long-term needs of a fiscally constrained country like The Gambia.
- Establishment of sustainable funding for road maintenance by introducing a fuel levy charge on road users as a main source of road maintenance funding for the network.

Also the revision of the current schedule of user charges and road access fees to reflect the damage caused to road pavements by the vehicle type.

- Development of a five year Road Maintenance Action Plan (R-MAP) based on a revitalized road fund with main revenue source coming from fuel levy;
- Programme for the development of the local road construction Industry; starting with labor based method in collaboration with ILO and other development partners

b. Iran

Mr. Mohsen SADEQI, Deputy General Director, Ministry of Roads and Urban Development of Iran made a presentation on the road maintenance in Iran. He started his presentation by giving the background rationale behind the road maintenance in Iran. He underlined that in association with the growth rate of registered vehicle (annual growth rate is 12%) and increasing rate of road network in Iran, road maintenance is taken as an important issue in Iran. He said that the average growth rate of road construction (equivalent 2 lane road) is 3% in Iran.

Concerning the current road network asset in Iran, he highlighted that according to the 2014 data, the freeway is 2.203 km, highway is 14.155km, main road is 21.628 km, secondary road is 46.458 km, paved rural road is 103.169 km and non-paved rural road is 26.360 and totally 214.000 km in Iran. Then, he expressed the criterias to determine an arterial network as km. He continued with some background information about the creation of Land Transport Regulatory Commission (LTRC) and its objectives. He stated that new law was issued in 2010 to the creation of an organization of land transport to include all land transport (passengers, goods, and rail). Therefore, Public Transport Regulatory Commission (PTRC) replaced by LTRC and it began working within its responsibilities on 01-10-2010. LTRC aims to regulate, control the land transport services and encourage investment in the land transport sector in line with the objectives of economic and social development. LTRC is responsible of;

- Implementation of the general policy of land transport
- Work to meet the demand for land transport services and secure it in a good level and appropriate cost
- Plan land transport services network and its facilities and routes
- Develop the required plans for operating land transport facilities
- Locate land transport facilities in coordination with the relevant authorities, to manage and supervise services
- Develop plans for road construction and maintenance programs to make recommendations in this regard in the public interest of the beneficiaries in coordination with the relevant authorities
- Develop procedures to prevent road traffic crashes according to international requirements in coordination with the relevant authorities

c. Palestine

Mr. Nazih QABAHA, Director of Technical Control, Ministry of Transport made a presentation about road maintenance in his country. In the beginning of his presentation, he showed off the separation wall and its effect on land and water in Palestine.

Concerning road network in the West Bank, he stated that the road network managed by the the ministry of transport in the West Bank is about 3,700 km and this network spreads within the territory of the West Bank, which has an area of approximately 5700 km², and serves the West's approximately 4.7 million inhabitants population. He underlined that the assessment of the road is made by General Administration of Roads. There are several criterias to make assessment about the performance of the roads and currently a standard model for road assessment is being developed by the General Administration of Roads. He further stated that there is currently a certified system for classifying roads at the national level according to the function of the road.

Moreover, Mr. QABAHA highlighted the length of road network in is country saying that while in 2010 the network length was 3675km, in 2015 this length the length increased to 3710 km. when the conditions of roads in 2010 are compared the 2015, it seen that there is a marked improvement. The total ratio of roads which are classified as good or very good increased to 63% in 2015 in comparisen to 2010, 51%. The fundamental causes for road damage are alligator/fatigue cracking, edge cracking, reflection cracking, block cracking, and slippage crack.

Regarding the road maintenance management in his country, Mr. QABAHA explained that the road construction costs large sums of money and the cost of keeping the roads in good condition are increasing year after year. Often the amount of money available is not sufficient to meet the maintenance needs as well as to follow modern methods in determining maintenance priorities with close monitoring of the condition of the roads.

After giving some information on the types of road maintenance in his country, he underlined that there is a strategy for road maintenance which was formulated and being updated by the Ministerial Infrastructure Committee headed by the Ministry of Public Works and Housing. He further highlighted the main tasks of the General Directorate of Roads as followings;

- Providing safe and effective roads to meet the needs of peoples,
- Review of the technical specifications for roads,
- Preparation of a manual to determine the development and maintenance priorities,
- Preparation of designs and tender documents for development projects in the programs and plans,
- Organizing road maintenance operations..

Concerning making use of private sector in road maintenance, he noted that private sector is recruited to implement road maintenance under the supervision of responsible authorities.

Lastly, Mr. QABAHA touched upon the main challenges faced in Palestine in terms of road maintenance by saying that instability of allocated budget for maintenance is the most urgent problem. Additionally, the special situation of the Palestine and the separate wall makes planning as well as maintenance of roads difficult.

d. Turkey

Mr. Ahmet SAĞLIK, Director of Quality Management and R&D, General Directorate of Turkish Highways made a presentation on Turkey's experience in the road maintenance sector. At the outset, Mr. SAĞLIK highlighted that General Directorate of Highways (KGM) is the Turkish Road Authority with the legal personality under the Ministry of Transport, Maritime Affairs and Communications and responsible from planning, design, construction, maintenance and operation of motorways, state and provincial roads. Then he gave some information about the organization structure of KGM and its staff.

Concerning the composition of the road network in his country, Mr. SAĞLIK noted that the total network of the road is 66.437km as of 01.01.2016, and of which 48,9% is provincial roads, 47,8% is state roads and 3,4% is motorways. He underlined that 89,8 % of passenger and 89,5 % of freight is transported by roads and the percentage of heavy vehicle is around 30%.

Regarding the road maintenance, he explained that maintenance can be defined as preserving and keeping each type of roadway, roadside, structures as nearly as possible in its original condition as constructed. The various maintenance functions include; surface maintenance, roadside and drainage maintenance, shoulder and approaches maintenance, snow and ice control, bridges maintenance, traffic service. Maintenance provides a serviceable, safe and sustainable road network. Regarding the road maintenance activities and total expenditure in Turkey in 2015, he said that the total expenditure for the road maintenance accounts about 18% of total KGM budget. All the expenditures are funded from general budget.

He further explained that routine maintenance and snow fighting works are outsourced by contract. It is the generally lump sum contracts in maintenance and unit price contract in snow fighting. Contractor has the responsibility of keeping the road serviceable and safe for 7 days 24 hours. Unless fulfilling its responsibilities, contractor is exposed to penalties. Construction of surface treatment is also started to be tendered with the performance based specifications comprising several years (3-5 years) contracts. He also noted that Turkish Directorate of Highways (KGM) began pavement Management System Development studies in 1990's to manage hot mix asphalt roads provided with large investments and continues its studies decisively at the present time. Functional and structural condition measurements have been made across Turkey to create database within the scope of developing Pavement Management System.

Moreover, Mr. SAĞLIK gave some detailed information on the measurements of the present condition of the pavement and types of analysis made on this issue such as IRI Analysis,

Rutting Analysis, Surface Distress Analysis, and Falling Weight Deflectometer (FWD) Analyses. He emphasized that Highway Development & Management (HDM-4) performance evaluation models have been used in Turkey Pavement Management System. The best maintenance method is recalculated and projected as a result of budget optimization in accordance with optimum budget allocated for each section. Thus, optimum pavement value management is ensured.

At the end of his presentation, Mr. SAĞLIK underlined that KGM closely follows the scientific and technological developments and operates R&D Project to create economical, green and safe road network infrastructure. In 2013 KGM started to use Cold In Place Recycling for renewal of the road pavements. It has been seen that it is very feasible, fast and environmentally friendly way of rehabilitations. In 2016, KGM is planning to start Hot In Place Recycling which is fast and economical compared to minning and overlay.

e. Morocco

Mr. Mohammed BEJRHIT, Ingénieur General, Roads Deputy Director in the Ministry of Equipment Transport and logistics made a presentation on the road maintenance in Morocco. He started his presentation giving some information about the country and its roads and motorway networks. These networks are composed of 57300km government owned network, of which 72% are paved and 840km are motorways. While urban roads, forest roads and local roads are managed by other actors, 1588 km of motorway are managed by Moroccan Motorways Company (ADM).

The road network is the subject of two types of maintenance:

- The periodic maintenance on strengthening, widening and paving roads is done at 100% by private companies.
- The routine maintenance conducted yearly by the equipment brigades under different territorial Directorates of Equipment Transport and Logistics .And also by private contractors (80% of the work volume).

Since the year 2000, the length growth of the road network (+2.0% per year), the traffic volume (+5.6% per year), the impact of climate change and road users requirements presents challenges for the road maintenance.

Morocco road administration has long tradition of collecting road network data and survey made every 2 years. The road network is also the subject of a systematic auscultation using high performance devices that measure parameters (deflection, roughness, evenness). Indicators are defined to assess pavement condition. Visual survey leads to indicators to assess network status according to four classes: Class A: Good; Class B: fair; Class C: bad; Class D: very bad.

The table and graph below relate status (A + B) evolution of the road network since 1990:

Years	1990	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010	2012	2014
Condition (A+B)	53,3	56,4	61,8	63,1	64,7	66	64,7	64,5	59,9	54,2	54,3	53,5	58,3

Furthermore, Mr. BEJRHIT presented the data about bridges, issued from the Moroccan BMS, which indicates that more than 1000 bridges out of 7500 need to be repaired, reconstructed or need to meet some standards (load, width or hydraulic capacity). Then he explained his administration strategy by focusing on the asset management and maintenance plan over the next 20 years (2016-2035 periods). He expressed that the objectives of the said strategy are:

- Improve the road condition from 58.8% in 2014 to 70% in 2035,
- Widening 8000km of narrow roads (4m to 6m),
- Resurfacing of 7500km,
- Modernisation of 10000km,
- Rehabilitation of 1000 bridges,
- Renewing of 300 important bridges,
- Repairing flood damages.

This requires budget of 65 billion Dirham's over 20 years which means 3.25 billion Dirham's per year. This means to double the financial resources dedicated to the road maintenance over the past years.

Concerning the maintenance funds in his country, Mr. BEJRHIT underlined that the maintenance funds are ensured through:

- Road fund which was established in 1989,
- Government budget,
- Partnerships with decentralized communities,
- International financial institutions,
- The Moroccan road financing fund.

Moreover, he informed the participants on the Moroccan practices to elaborate maintenance strategy and action plans. He said that the methodology for the evaluation of maintenance strategies of the road network within the five-year plans consists of the following phases:

1st phase:

- Development of a typology of the paved road network based on objective criteria to characterize the state point of view of the network and function,
- Ranking of all paved roads in the typical case of typology,
- Choice of appropriate intervention scenarios for each case type and calculation of cost of work on the basis of normative structures.

2nd phase: economic evaluation using the HDM model. This is the evaluation of the economic viability of all scenarios of intervention identified in the first phase.

3rd phase: maintenance strategies assessment of the paved road network.

To give an example about the working process among these three phases, Mr. BEJRHIT touched upon the different phases for developing the Five-Year Plan 2015/2019 as described below:

- Guidance note and framework note sent to regional and provincial services,
- Consolidation of proposals from regional and provincial services excluding budgetary constraints,
- Fixing the budget constraint by the Road Directorate,
- Economic evaluation and relevance of operation,
- Prioritization of operation,
- Validation with regional and provincial services and adjustment during coordination meetings in the Roads Directorate,
- Development FYP 2015/2019,
- Implementation of the FYP 2015/2019.

At the end of his presentation, Mr. BEJRHIT emphasized that Morocco use the PBC to manage the routine maintenance because private contractors are more mature and lack of human resources in the public sector. The road network evolution requires ensuring good service level for the road users (outcomes) instead of focusing on outputs.

6. Perspectives of International Institutions on Road Maintenance

a. IDB Group: “Experiences of IDB Regarding Road Maintenance in the OIC Member Countries”

Mr. Cem Galip ÖZENEN, Transport and PPP Program Specialist, Islamic Development Bank Group (IDB) made a presentation on “Experiences of IDB Regarding Road Maintenance in the OIC Member Countries”. At the beginning of his presentation, he briefed the participants about IDB and its main activities. Then he gave some information on IDB’s project cycle and infrastructure operations by underlining that the aggregate infrastructure financing of IDB since inception is 29 billion US\$ and the major recipient region is Middle-East and North Africa with 45% of total financing. He expressed that transport is the second area, after energy, which has been financed by IDB so far with 32%.

With regards to the activities of Transport Division of the IDB, Mr. ÖZENEN said that key focus areas are;

- Development of International Transport Corridors,

- Trans-Sahara Highway (TSH),
- CAREC Transport Corridor.
- Improve Transport Infrastructure,
 - Roads, Railways, Airports, Seaports.
- Increase Accessibility,
 - Rural Networks.

He continued his presentation by outlining that when compared to the other modes of transport such as railways, civil aviation, or ports, waterways and shipping, roads and highways is the major mode of transport financed by IDB so far with 78% of total amount. The significant projects implemented with the contribution of the IDB as below;

Sr. No.	Project Description	IDB Participation (US\$ m)	Country
1.	Western-Europe – Western-China Road Corridor	224	Kazakhstan
2.	Padma Multi-Purpose Bridge	140	Bangladesh
3.	Akieni- Okondja Road	107	Gabon
4.	Marrakech - Agadir Highway	106	Morocco
5.	Regional Roads Development	65	Indonesia
6.	Singrobo-yamou Soukro Highway (Phase III)	61	Cote d'ivoire

Then he explained why road maintenance is so important. He said that in order to sustain the benefits of road improvement, it must be followed by a well-planned program of maintenance. Without proper maintenance, road infrastructure can fall into disrepair, rapidly. This results with preventing positive outcomes of the longer term impacts of road improvements on development.

Concerning the importance of timely maintenance, he stressed that if defects are neglected and/or delayed; all roads may fail completely, this requires full reconstruction (which means more and more investment), and this is much more costly.

Regarding the relations between road maintenance and overall economy he outlined that delayed maintenance; increases vehicle operating costs, puts traffic safety is at risk, reduces efficiency and increases reluctance by transport operators to use the roads. The result is a heavy burden on the economy, passenger and freight services are reduced, loss of economic and social development opportunities.

Then, Mr. ÖZENEN touched upon the IDB's experiences on road maintenance with a case study, Aktobe-Makar Road Improvement Project in Kazakhstan. He explained that the project had four component; civil works, consultancy services, road maintenance equipment and land acquisition. He said that the total cost of the project is 273 million US\$. Additionally, Mr. ÖZENEN compiled the outputs of the said project as followings;

- 56 km national road (4 lanes from km 11- 100, and 2 lanes from km 100 - 160) by 2021. Carriageway width is 7.5 m shoulder width is 1.5-3.75 m,
- 50% reductions in accidents,
- 30% decrease in vehicle operating costs,
- Average speed from 40 km/hr to 80km/hr,
- Better, faster and safer transport.

7. Roundtable Discussions on Policy Recommendations for Enhancing Road Maintenance Services

The Session began with a policy debate for the possible policy actions to be taken to approximate member state policies in the field of road maintenance. Delegate of Uganda, Mr. Katushabe WINSTONE moderated the session. Discussions were made on topics included in the Policy Questions which was circulated to delegates prior to the Meeting. Mr. WINSTONE firstly gave the floor to Mr. Nihat AKBALIK, Expert in the COMCEC Coordination Office, for his presentation. Mr. AKBALIK made a presentation about the Policy Questions and answers of the responding member countries. The Policy Questions includes questions to examine the state of road maintenance in the member countries, common obstacles and need for technical assistance. After the presentation and the deliberations during the session, participants agreed on the following policy advices² to be submitted to the 32th Ministerial Session of the COMCEC for adoption.

- **Policy Advice I:** Developing a National Road Maintenance Strategy Based on Evidence and Data,
- **Policy Advice II:** 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,
- **Policy Advice III:** Making Use of Performance-Based Contracts in Road Maintenance,
- **Policy Advice IV:** Establishing a Road Database Management System.

² The Room Document is attached as Annex 3.

8. Utilizing the COMCEC Project Funding

A presentation with relation to introducing COMCEC Project Funding system was made by Mr. Ali ORUÇ, Expert at COMCEC Coordination Office (CCO). He presented the COMCEC Project Funding modality and explained ways and means to utilize this modality. Firstly, Mr. ORUÇ informed the participants about where the COMCEC Project Funding stands in the COMCEC Strategy. He underlined the basic qualifications of the COMCEC Project Funding as “simple and clearly defined procedures and financial Framework”, and mentioned that CCO provided continuous support to the member countries during the all stages of the COMCEC Project Funding Mechanism. He stressed that all funds provided in the COMCEC Project Funding Mechanism are grant based. Therefore, project owners don’t need to make any repayment for the funds received.

After briefly explaining the Project Cycle Management (PCM) concept, Mr. ORUÇ highlighted the potential project owners. It was emphasized that relevant ministries and other public institutions of the Member Countries and the OIC Institutions operating in the field of economic and commercial cooperation could submit projects. He also underlined that member countries have to be registered to respective working group in order to submit their project proposals.

He continued his presentation with the clarification of “Project Selection Criteria” namely, compliance with Strategy’s Principles, targeting strategic objectives of the Strategy, focusing on output areas and pursuing multilateral cooperation among the OIC Member Countries. He mentioned that CCO had revised project selection criteria for third call for project proposals and regular participation of member countries and OIC institutions to relevant working group meeting had been added as a new criterion.

Mr. ORUÇ stated that project proposals submitted by the member countries should be compliant with the sectoral themes for the third call stated in the Program Implementation Guidelines. He also explained the importance of the multilateralism for project appraisal and stated that project proposals should focus on common problems of at least two member countries and also should offer joint solutions for these problems. Moreover, steps and roles of these key actors throughout the project application process were defined.

Monitoring of projects was another issue explained in the presentation. Mr. ORUÇ presented that the Bank would be mainly responsible for financial and technical monitoring of projects while the CCO would oversee the overall implementation of the PCM.

Mr. ORUÇ expressed that from the illustration of the indicative grant limits and co-finance rates for the COMCEC projects, it was seen that Member Countries could submit a project with a budget up to USD 250.000 with the condition that they have to cover at least ten percent of project total budget (cash or in kind). This amount would be USD 100.000 for the OIC Institutions and at least twenty five percent should be covered by the project owner.



Mr. ORUÇ also gave information on 2015 Projects. He stated that member countries and OIC institutions had shown great interest to the second call and 62 project proposals were submitted by 20 member countries and 3 OIC institutions. He also stated that 1 successful projects in transport and communications area were being implemented under the COMCEC Project Funding in 2014. He continued his presentation with demonstration of project proposal submission by using new online project submission system.

At the end, Mr. ORUÇ reminded participants that fourth call for project proposals was started as of early September, 2016 and project proposals would be submitted to the CCO until September 31th, 2016. He also invited all esteemed countries and OIC institutions to submit their project proposals.

At the end, the coordinator of the transport project, which was successfully implemented by the project owner, Turkey, made a presentation on their project and the activities undertaken during the project implementation period.

9. Closing Remarks

The Meeting ended with closing remarks of Mr. Metin EKER. He thanked all the representatives for their attendance and precious contributions. He underlined that the policy debate session was highly beneficial since it was agreed upon several policy recommendations which would not only improve current situation in the OIC countries but also would serve to policy approximation among the member countries.

In conclusion, Mr. EKER informed the august house that the next meeting, 8th Meeting of the COMCEC Transport and Communications Working Group will be held on October 27th, 2016 in Ankara with the theme of "Improving Road Safety in the OIC Member Countries". He stated that a research report will also be prepared on this theme and will be shared with the focal points and other participants well ahead the meeting.

Annex 1: Agenda of the Meeting



7TH MEETING OF THE COMCEC TRANSPORT AND COMMUNICATIONS WORKING GROUP (March 24th, 2016, Ankara, Turkey)

“Enhancing Road Maintenance in the OIC Member States”

Opening Remarks

1. COMCEC Transport Outlook
2. The Conceptual Framework for Road Maintenance and the Global Practices
3. The Current Situation of Road Maintenance Practices in the OIC Member States and Lessons Learnt from the Selected Case Studies
4. Roundtable Discussion on Policy Advices to Improve Road Maintenance Practices in the OIC Member States
5. Making Best Use of COMCEC Project Funding
6. Member States’ Presentations
7. Perspectives of International Organizations

Closing Remarks

Annex 2: Program of the Meeting



7TH MEETING OF THE COMCEC TRANSPORT AND COMMUNICATIONS WORKING GROUP (March 24th, 2016, Ankara)

“Enhancing Road Maintenance in the OIC Member States”

- 08.30-09.00 Registration**
- 09.00-09.05 Recitation from Holy Qur’an**
- 09.05-09.15 Opening Remarks**
- 09.15-09.35 COMCEC Transport Outlook**
- Presentation: Mr. Ekrem KARADEMİR
Senior Transport Specialist
COMCEC Coordination Office
- 09.35-09.45 - Discussion**
- 09.45-10.20 Conceptual Framework of Road Maintenance and Global Trends**
- Presentation: Dr. Adnan RAHMAN
Director
International Road Federation (IRF)
- 10.20-10.45 - Discussion**
- 10.45-11.00 Coffee Break**
- 11.00-11.40 Evaluation of Road Maintenance in the OIC Member Countries and Review of the Case Studies**
- Presentation: Dr. Adnan RAHMAN
Director
International Road Federation (IRF)
- 11.40-12.30 - Discussion**
- 12.30-14.00 Lunch**

14.00-14.15 Roundtable Session on Policy Recommendations for Enhancing Road Maintenance in the OIC Member Countries

There will be a policy roundtable under this agenda item. The main inputs of the roundtable will be the findings of the analytic study and the member states' responses to the policy questions circulated by the COMCEC Coordination Office. At the beginning of the session, CCO will make a short presentation introducing the responses of the Member Countries to the policy questions as well as the Room Document.

- Presentation: "Responses of the Member Countries to the Policy Questions on Enhancing Road Maintenance in the OIC Member Countries"
Mr. Nihat AKBALIK
Expert
COMCEC Coordination Office

14.15-15.30 - Policy Discussion

15.30-15.50 Utilizing the COMCEC Project Funding

- Presentation: Mr. Ali ORUÇ
Expert
COMCEC Coordination Office

15.50-16.00 - Discussion

16.00-16.15 Coffee Break

16.15-17.15 Member State Presentations

- Presentation(s)

17.15-17.45 - Discussion

17.45-18.00 Perspectives of International Organizations on Road Maintenance

- Presentation: "Experiences of Islamic Development Bank Regarding Road Maintenance in the OIC Member Countries"
Mr. Cem Galip ÖZENEN
Transport and PPP Program Specialist
Islamic Development Bank

18.00-18.15 - Discussion

18.15-18.25 Closing Remarks

Annex 3: The Policy Recommendations

ROOM DOCUMENT FOR THE POLICY DEBATE SESSION OF THE 7TH COMCEC TRANSPORT AND COMMUNICATIONS WG MEETING

A policy debate session will be held during the 7th Meeting of the Transport and Communications Working Group regarding the possible policy actions to be taken to approximate member state policies in the field of road maintenance. The items to be discussed in this session are identified by taking into consideration the research report titled “Enhancing Road Maintenance in the OIC Member States” and the responses of Member States to the policy questions sent by the COMCEC Coordination Office specifically for this meeting.

Policy Recommendation I: Developing a National Road Maintenance Strategy Based on Evidence and Data

Rationale:

Preventive maintenance requires, almost by definition, looking into the future – the future condition of the road network needs to be anticipated and preventive actions taken to prevent serious deterioration of the road network. Doing so requires, clear goals and objectives, excellent knowledge about the current state of the road network, a realistic picture of available funds for funding maintenance works, and very importantly, accurate, timely, and relevant data for setting priorities and making trade-offs when deciding on which maintenance works to fund and which ones to defer. All of these issues should be brought together in a National Maintenance Strategy.

A national road maintenance strategy should define clear goals and objectives for the performance and “levels of service” for the different categories of roads in the road network. The performance goals and levels of service must be realistic insofar that they must be explicitly and directly linked to available resources and funding for maintenance activities. Furthermore, the national strategy should explicitly assign the responsibilities for realizing the stated performance goals and objectives, for the different categories of roads, to specific institutions and organizations. The sources and volume of revenues/funds available to each of these institutions should also be specified in this strategy. The strategy itself must be based on solid evidence and data that is regularly collected to support the continued evolution of this strategy. The Asset Management Framework is a widely used framework and can form a good basis for developing such a national road maintenance strategy.

Policy Recommendation II: 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

Rationale:

Research and experience have shown that inadequate and unreliable funding is a major setback for improving road maintenance in many countries. Adequate, secure, and stable funding for carrying out periodic maintenance services is of crucial importance for a well-functioning

road network. The number of countries that do not have a road fund is clearly an issue for the OIC Member States. However, road funds are simply a mechanism for facilitating adequate and stable flow of funds to finance required maintenance activities. Besides, even the road funds that have been established are not all performing equally effectively. The effective performance of road funds requires a sound legal framework and institutional structure. Generally, the road funds that have been established in the OIC Member States are characterized by the following:

- The legal basis of many road funds remains weak and the independence and autonomy of the road funds is not ensured,
- The participation of stakeholders in the road funds is very limited and the accountability and transparency of road funds is mostly limited to conducting an annual financial audit,
- Road funds rarely, use data-based performance indicators for monitoring and evaluating the impact of their funding activities. Thus, there is no link of the funding to improvements in the performance of the road network.

As a result, adequate and stable funding for maintenance is often limited, and there is generally a lack of specifically dedicated funding source to financing maintenance activities. This situation generally causes what is known as the “maintenance gap”, making a detrimental impact on the performance of the road network.

Policy Advice III: Making Use of Performance-Based Contracts in Road Maintenance

Rationale:

Performance-based contracts have several advantages for outsourcing maintenance to private sector. For such contracts to be implemented, responsible road agencies need a competent maintenance program management, a good monitoring system, and clear and transparent procurement procedures. In this type of contract, contractor is paid monthly based on performance outputs measured against standards stated in the contract rather than inputs. Penalties are imposed if the outcomes for a specific activity fail to comply with the contract standards, and payment may be reduced or suspended until the necessary repairs are done. The fundamental point is that the emphasis is on realizing the performance objectives in terms of the end-result, the outputs. Thus, for example, the focus is not on how many kilometers of the road network have been maintained, but rather on, for example, the cumulative delays resulting from maintenance works on the road network. This focus makes it important to no longer just do the maintenance, but do it in ways that minimize the interruptions and disturbances resulting from the maintenance works.

Policy Recommendation IV: Establishing a Road Database Management System

Rationale:

The basis of effective preventive maintenance is good information; information about the condition of the road network and the volume of traffic on this road network. Making preventive maintenance not just effective, but also cost-effective, further requires information on the costs of various maintenance works, and their beneficial effects. This information is



needed not only for the current time, but also needed in models (transport demand models, pavement deterioration models, cost models) to forecast the future condition of the road network, for evaluating the cost-effectiveness of various maintenance options and strategies, for setting priorities, and for allocating resources according to these priorities. Compared to the cost of the maintenance works themselves, this data collection exercise is quite inexpensive, but the returns it provides are huge.

Instruments to Realize the Policy Advices:

COMCEC Transport and Communications Working Group: In its subsequent meetings, the Working Group may elaborate on the above-mentioned policy areas in a more detailed manner.

COMCEC Project Funding: Under the COMCEC Project Funding, the COMCEC Coordination Office calls for projects each year. With the COMCEC Project Funding, the Member Countries participating in the Working Groups can submit multilateral cooperation projects to be financed through grants by the COMCEC Coordination Office. For the above-mentioned policy areas, the Member Countries can utilize the COMCEC Project Funding and the COMCEC Coordination Office may finance the successful projects in this regard. These projects may include organization of seminars, training programs, study visits, exchange of experts, workshops and preparing of analytical studies, needs assessments and training materials/documents.

Annex 4: List of Participants

LIST OF PARTICIPANTS OF 7th MEETING OF THE COMCEC TRANSPORT AND COMMUNICATIONS WORKING GROUP (MARCH 24th 2016, ANKARA)

A. INVITED STATES

THE GABONESE REPUBLIC

- Mr. CLEMENT MANDONGAULT
First Counsellor, Embassy of Gabon in Ankara
- Mr. THIBAUT IFOUNGA
Protocol Affairs, Embassy of Gabon in Ankara

THE REPUBLIC OF THE GAMBIA

- Mr. CHERNO LAMIN JALLOW
Project Engineer, National Roads Authority
- Ms. RAMATOULIE CEESAY
Planner, Ministry of Transport, Works and Infrastructure

THE REPUBLIC OF GUINEA

- Mr. AHMADOU KAOMI BARRY
Studies and Planning Officer, Ministry of Transport

THE REPUBLIC OF INDONESIA

- Mr. BAITUL IHWAN
Head of Division of Legal, Ministry of Transportation
- Mr. BUDI SANTOSO
Head of Section of Traffic Management, Ministry of Transportation

THE ISLAMIC REPUBLIC OF IRAN

- Mr. MOHSEN SADEQI
Deputy of General Director, Ministry of Roads and Urban Development

HASHEMITE KINGDOM OF JORDAN



- Ms. FATIMA HAMASHA
Head of Routine Maintenance and PPS, Ministry of Public Works and Housing
- Mr. NAIM HASSAN
Development and Planning Director, Ministry of Transport

THE STATE OF KUWAIT

- Mr. AHMAD AL HASSAN
Assistant Undersecretary, Ministry of Public Works

THE KINGDOM OF MOROCCO

- Mr. MOHAMMED BENKHEDDA
Head of the Division of Planning and Programs, Ministry of Transport and Logistics
Equipment
- Mr. MOHAMMED BEJRHIT
General Engineer Roads Deputy Director, Ministry of Transport and Logistics
Equipment

THE STATE OF PALESTINE

- Mr. NAZIH QABAHA
Director of Technical Control, Ministry of Transport
- Mr. AZMI ABU GHAZALEH
Economic Counsellor, Embassy of Palestine in Ankara

THE STATE OF QATAR

- Mr. SALEH SAEED AL MARRI
Urban Planner Specialist, Ministry of Transport

KINGDOM OF SAUDI ARABIA

- Mr. TURKI ALKASEEM
General Manager, Ministry of Transportation

THE REPUBLIC OF TUNISIA

- Mr. SLAH ZOUARI
General Director, Ministry of Equipment, Housing and Spatial Planning

REPUBLIC OF TURKEY

- Mr. MÜCAHİT ARMAN
Head of Department, General Directorate of Highways
- Mr. OĞUZ SEHTİYANCI
Director of Strategic Planning Division, General Directorate of Highways
- Mr. ATILLA YAYLIOĞLU
Deputy Director, General Directorate of Highways
- Mr. AHMET SAĞLIK
Director of Quality Management and R&D, General Directorate of Highways
- Mr. FARUK ZİYA ÖZTÜRK
Chief of Road Network, General Directorate of Highways
- Mr. MEHMET ATAŞ
Chief of Road Maintenance, General Directorate of Highways
- Ms. EDA BURCU BULUT
EU Expert, Ministry of Transport, Maritime Affairs and Communications
- Ms. GÜLNUR YAVUZ
Assistant Manager, General Directorate of Highways
- Ms. SİBEL ESRA KARATAŞ
General Directorate of Highways

THE REPUBLIC OF UGANDA

- Mr. KATUSHABE WINSTONE
Assistant Commissioner, Ministry of Works and Transport

THE REPUBLIC OF UZBEKISTAN

- Mr. UCHKUN KHUSANOV
Councillor, Embassy of Uzbekistan in Ankara

B. INVITED INSTITUTIONS

ECORYS

- Mr. GEERT SMIT
Manager International Business Development
- Ms. ASLI GÜLGÖR



Deputy Director-Markets, Principal Consultant

ISLAMIC DEVELOPMENT BANK GROUP (IDB GROUP)

- Mr. CEM GALİP ÖZENEN
Transport and PPP Program Specialist
- Mr. AHMED AL QABANY
Transport Specialist
- Mr. YUSUF YÜKSEL
Program Specialist

INTERNATIONAL ROAD FEDERATION (IRF)

- Mr. ADNAN RAHMAN
Director

STATISTICAL, ECONOMIC AND SOCIAL RESEARCH AND TRAINING CENTER FOR ISLAMIC COUNTRIES (SESRIC)

- Mr. CEM TİNTİN
Researcher, Economic and Social Research Department

C. COMCEC COORDINATION OFFICE

- Mr. M. METİN EKER
Director General, Head of COMCEC Coordination Office
- Mr. MUSTAFA TEKİN
Head of Department
- Mr. SELÇUK KOÇ
Head of Department
- Mr. EKREM KARADEMİR
Expert
- Mr. KAĞAN AKDOĞAN
Expert
- Mr. NİHAT AKBALIK
Expert

- Mr. ALİ ORUÇ
Expert, PCM
- HASAN YENİGÜL
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- Ms. HAVVA KÖSEOĞLU
Coordinator of Registration Office
- Ms. GÜL SAYIN
Coordinator of Documentation Centre
- Mr. KEMAL ARSLAN
Coordinator of Meeting Rooms
- Mr. ALİ VURAL
Coordination of Website
- Mr. ERCAN İBİK
Coordinator of Transportation
- Ms. LEYLA AŞK
Coordination of Social Programme
- Mr. MUSTAFA ADİL SAYAR
Protocol Relations
- Mr. NAZIM GÜMÜŞ
Protocol Relations