COMCEC

CCO BRIEF ON TRANSPORT and COMMUNICATIONS COOPERATION

COMCEC COORDINATION OFFICE
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BRIEF ON TRANSPORT AND COMMUNICATIONS COOPERATION

I. Introduction and Global Trends

Transportation and communications are vital sectors for the development of countries. The transportation industry is growing rapidly due to the increasing per capita income and mobility needs of households, trade globalization, deregulation and privatization of the transportation infrastructure and services, as well as technological progress.

Transport infrastructure is crucial for both economic and social development of nations and quality infrastructure is a key pillar of international competitiveness.[1] According to the 'Infrastructure to 2030' report, global transport and distribution infrastructure investment needs could exceed USD 11 trillion over the 2009-2030 period. In order to effectively plan and implement 10 to 20 years of transport infrastructure at the right time and location, countries need to have sound national policy frameworks and ensured funding.

Furthermore, with regard to surface transport, worldwide road and rail passenger travel is expected to grow around between 120% to 230% by 2050, while this growth is expected to range from 240% to 450% for non-OECD economies. Moreover, global road and rail freight transport is projected to increase between 230% and 420%.[2] Transnational transport corridors play a pivotal role in the realization of this prediction by enhancing intra-regional trade and investments and connecting economies across a region. Therefore, due to its critical importance, the issue of transnational transport corridors has recently become an important agenda item for the COMCEC Transport and Communication Working Group (TCWG).

Similarly, the Information and Communications Technologies (ICTs) industry is also growing and it continues to be at the heart of growth, innovation, economic and social development. The share of the ICT sector in GDP is around 6 % in OECD member countries and relatively less in developing countries. With the rapid diffusion of digital technologies into developing countries, this number could rise in the future. In addition, the indirect contributions of ICT investment to economic growth, through improvements in total factor productivity, could also be large as well.

Today, mobile devices and related broadband connectivity continue to more embedded in the fabric of society and they are crucial in driving the momentum in economic development of countries. According to the World Bank[3], more households in developing countries own a mobile phone than have access to electricity or clean water, and nearly 70 percent of the bottom fifth of the population in developing countries own a mobile phone. The number of internet users has more than tripled in a decade—from 1 billion in 2005 to an estimated 3.5 billion at the end of 2016[4].

Despite the fact that broadband usage has been increasing rapidly throughout the World, significant differences arise among the regions in terms of broadband availability and usage rates, depending on the economic development of the country. Thus, the implications for policy making are far-reaching.

[1] OECD, 2012
[2] International Transport Forum (ITF)
[3] http://documents.worldbank.org/curated/en/896971468194972881/pdf/102725-PUB-Replacement-PUBLIC.pdf
[4] ITU data

Given its critical importance, the COMCEC TCWG elaborated the broadband penetration topic in its ninth meeting.

II. Transport and Communications Cooperation under the COMCEC

Improving the functioning, effectiveness and sustainability of transport and communications in the Member States is the significant 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 in and among the Member Countries. Within this framework, COMCEC TCWG devoted its ninth meeting to the broadband penetration issue and tenth meeting to the transnational transport corridors.

III. Ninth Meeting of the Transport and Communications Working Group

Since the 32nd Session of COMCEC, the TCWG has held its ninth meeting on March 16, 2017 in Ankara, Turkey with the theme of "Increasing Broadband Internet Penetration in OIC Member Countries."

During the meeting, representatives of the Member States discussed and shared their views and experiences on how OIC Member Countries can maximize the potential of the broadband penetration as a driver for innovation and growth and what are the evolutions in the broadband penetration that policy makers need to consider and the challenges they need to address. Also, the benefits and risks of broadband internet penetrations were discussed by the participants. Additionally, the issue of policies that can be implemented to enhance the quality of services provided in this field was elaborated. The discussions were enriched by presentations from Member States and the private sector.

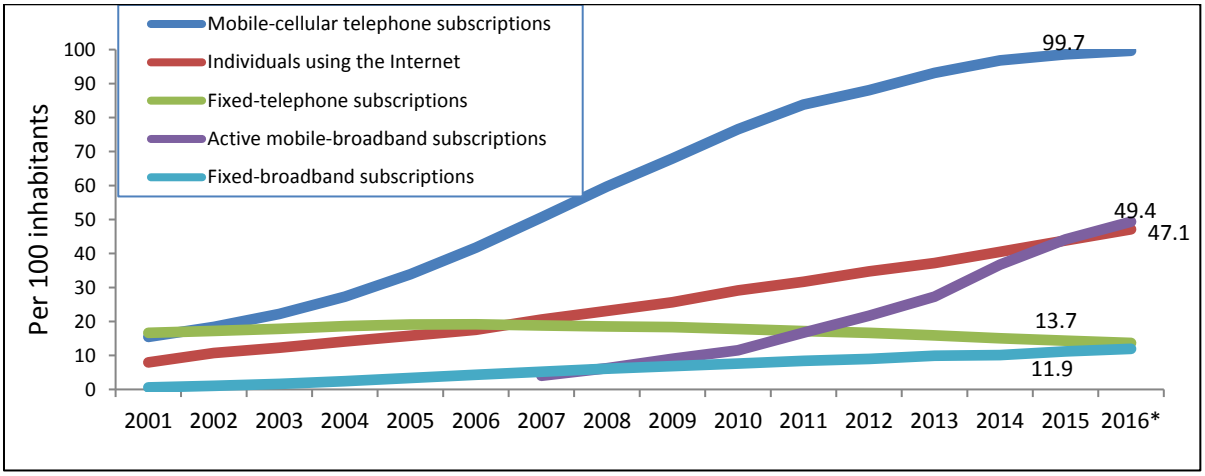
In an attempt to provide inputs for discussions during the meeting, the COMCEC Coordination Office (CCO) commissioned a research report on the same subject as the theme of the meeting. The said research specifies the state of broadband penetration in the OIC Member States, the main challenges they face and the possible policy recommendations that could be implemented to overcome these challenges. The report also reveals important figures with regard to the state of broadband in the world and global trends.

- The Footprint of Broadband Penetration in the World

The ICTs industry has been growing unprecedentedly during the last decade, as the Global ICT Developments Index[5] shows in Figure 1. The digital economy now spreads to almost all aspects of the world economy, impacting on sectors such as banking, retail, energy, transportation, education, publishing, media or health. ICTs are simply transforming the ways social interactions and personal relationships are conducted, with fixed, mobile broadband networks and devices.

[5] The Global ICT Developments Index (IDI) is a composite index that combines 11 indicators into one benchmark measure that can be used to monitor and compare developments in ICT between countries and over time.

Figure 1: Global ICT developments, 2001-2016



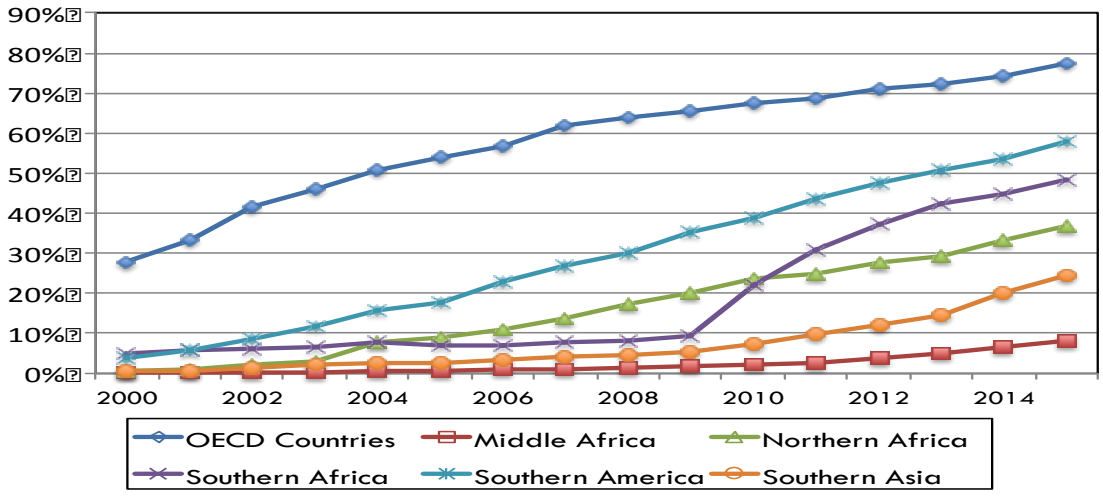
Note: * Estimate
Source: ITU World Telecommunication /ICT Indicators database

As a vital component of the digital economy, broadband is a critical infrastructure for fostering economic growth and citizen welfare. Beyond the benefits linked to GDP growth, broadband contributes to job creation and the enhancement of consumer savings. The above-mentioned research report highlights that the higher broadband penetration is, the stronger its effect is on economic growth. Thus, countries and their citizens will benefit from accelerating broadband adoption.

According to the report, 3.5 billion people are currently using the internet, of which 2.4 billion are from developing countries. Besides this, 34% of households in developing countries, 7% of households in the least developed countries (LDCs) and 80% in developed countries had internet access by the end of 2015, compared with the world average of 46%.

As Figure 2 indicates, internet use in emerging regions falls behind the developed world average (OECD) between 20 (South America) and 69 percentage points (Middle Africa). It is important to note, however, that at least for some regions in the emerging world (such as South America, Southern and Northern Africa), the gap with developed countries is gradually narrowing.

Figure 2: Internet penetration (as percent of population) (2000-2015)



Sources: COMCEC, Increasing Broadband Internet Penetration in the OIC Member Countries

- **Broadband Penetration in the OIC Member Countries**

The above-mentioned report reveals that since the 1990s broadband technology has undergone a dramatic diffusion throughout the OIC Member Countries. As of the end of 2015, 14.95% of households in the OIC Member Countries were connected to broadband technology, while 29.41% of individuals had mobile broadband connectivity. These statistics are even more impressive when considering that broadband did not start its diffusion process until 2001 in the case of fixed, and 2007 for mobile. In several OIC Member Countries such as Azerbaijan, Lebanon, Malaysia, Qatar, fixed broadband household penetration has exceeded 50%, while in others, for instance Bahrain, Saudi Arabia, and the UAE, mobile broadband penetration is higher than 70%.

The report also suggests that the percentage of internet users varies significantly across OIC regions as well. For example, internet penetration in African OIC countries reaches 27.90%, while in Arab OIC countries, it is 39.53%, and in Asian OIC nations, it is 28.05%. Fixed broadband penetration within OIC member states has reached 14.95% of all households, compared with 78.07% in OECD countries. On the other hand, mobile broadband penetration has reached 29.41% of the total population, compared with 87.17% for OECD countries.

Within this framework, it is clear that the universe of the OIC Member Countries is not homogeneous when it comes to the challenges faced regarding broadband development. The report identifies three broadband development stages to reveal the differences among the OIC Member Countries, in terms of broadband development, in the table below.

Table: OIC Member Countries: State of broadband supply and demand (2015)

	Supply			Demand	
	Fixed Broadband Coverage (ADSL)	**Mobile Broadband Coverage (3G)**	**Mobile Broadband Coverage (4G)**	**Fixed Broadband Penetration (households)**	**Mobile Broadband Penetration (population)**
OIC Average	**53.33%**	**64.16%**	**46.82%**	**14.95%**	**29.41%**
Advanced	**>70 %** 13 countries	**>70%:** 25 countries	**>70%** 6 countries	**>70%** 6 countries	**>70%** 9 countries
Intermediate	**70%-40%** 3 countries	**70%-40%** 17 countries	**70%-40%** 4 countries	**70%-40%** 8 countries	**70%-40%** 11 countries
Developing	**<40%** 39 countries	**<40%** 15 countries	**<40%** 37 countries	**<40%** 43 countries	**<40%** 35 countries

Source: COMCEC, Increasing Broadband Internet Penetration in OIC Member Countries

The table shows that some OIC Member Countries, generally in the Middle East (Bahrain, Oman, Qatar, Saudi Arabia, UAE) and Central Asia (Azerbaijan, Kazakhstan), tend to be fairly advanced in terms of supply and penetration of broadband services. In contrast, a large group of African countries (Benin, Burkina Faso, Cameroon, Chad, Guinea, Senegal, Sierra Leone, Sudan, Togo) are still at a limited stage of broadband development both in terms of supply and demand. Finally, a number of countries in North Africa (Egypt, Tunisia, Morocco), Sub-Saharan Africa (Cote d'Ivoire), Middle East (Kuwait) and Asia (Brunei, Kyrgyzstan, Turkey, Uzbekistan) exhibit advanced service coverage of the population combined with low penetration.

Nevertheless, OIC Member Countries are increasingly aware of the need to develop the digital economy, including broadband penetration in a strategic manner, to expand its benefits and respond to key challenges, such as reducing unemployment and lifting people out of poverty. In this context, policy-makers have been studying the whole range of social and economic effects related to broadband, as well as developing conceptual frameworks that help define policies aimed at maximizing its penetration and measuring its contribution.

The report highlighted the major challenges faced by OIC Member Countries in terms of broadband penetration as follows:

- Lack of investment of next generation broadband networks,
- Limited affordability,
- Limited awareness of the potential of the broadband service or lack of digital literacy,
- Lack of cultural relevance or interest.

In order to address these challenges and to maximize the potential of the broadband penetration for productivity, innovation, growth and jobs, the research report identified significant policy recommendations to be implemented by the member countries. The report is available on the COMCEC website. (www.comcec.org)

As the main output of the meeting, some important political recommendations were formulated as follows:

A. Policy Recommendations for all OIC Member Countries

I: Preparing national broadband strategies with the involvement of all the relevant stakeholders

II: Enhancing digital literacy by embedding programs in the formal education system and encouraging non-formal initiatives targeting specific segments of the population

B. Policy Recommendations for OIC Member Countries at Different Stages of Broadband Development

1. OIC Member Countries at an advanced stage[6] of broadband development

I: Achieving high-speed Internet coverage in rural and isolated areas through regulatory holidays[7] and direct subsidies with the purpose of improving the broadband investment business case

II: Enactment of financial incentives to operators for deploying 4G

2. OIC Member Countries at an intermediate stage[8] of broadband development

I: Reducing the cost of broadband services through targeted public policy initiatives

II: Lowering cultural and linguistic barriers through the development of local platforms, content, and applications.

3. OIC Member Countries at an initial stage[9] of broadband development

I: Offering a low-priced broadband service for consumers by state-owned and government subsidized telecommunications operators

II: Offering a low-priced or free broadband service targeted at disadvantaged segments of the population

[6] OIC Member Countries at an advanced stage refers to those countries that have high coverage and adoption of broadband internet.

[7] Regulatory holiday refers to the absence of some regulatory obligations to provide access, at least for a predefined period of time.

[8] OIC Member Countries at an intermediate stage generally have advanced coverage but limited broadband penetration.

[9] OIC Member Countries at an initial stage refers to those countries that need to increase both supply and demand for broadband services.

IV. Tenth Meeting of the Transport and Communications Working Group

The TCWG held its tenth meeting in Ankara, on October 17-18, 2017 with the theme of "Improving Transnational Transport Corridors in OIC Member States: Concepts and Cases." In addition, the 32nd COMCEC Ministerial Session decided on "Improving Transnational Transport Corridors among OIC Member Countries" as the theme for the Ministerial Exchange of Views Session at the 33rd Session of the COMCEC. In this respect, the 10th Meeting of the TCWG made the necessary preparations for the Ministerial Exchange of Views Session by formulating concrete policy recommendations on this topic for reporting to the 33rd COMCEC Session.

Transnational transport corridors play a pivotal role in enhancing intraregional trade and investments and connecting economies across a region. The interconnectivity dimension of transnational transport corridors requires shared efforts among the enroute countries and cooperative decision-making processes for their effective functioning.

The research report that was commissioned by the CCO on the transnational transport corridors issue has revealed important findings. For example, within the OIC geography, there are more than 100 transport routes dispersed across Arab, Asia, and Africa regions. However, not all of these transport routes are transport corridors. Transport corridors should meet the criteria of a multi modal transport corridor that facilitates trade. Transport corridors are denoted as such because, among others reasons, (1) they are subject to an international treaty between the countries that call it such, (2) there are common technical and operations standards, (3) the traffic is mostly international, and (4) the operating standards are usually higher than "ordinary" transport routes.

It is clear that political and institutional factors are the most important when it comes to OIC transport corridors. In terms of political factors, political tensions and crises take place in many OIC member states. As a result, trade restrictions and discriminations are often applied to one or more corridor countries. These reduce transport efficiency, increase transportation costs and consequently decrease the competitiveness of goods. In terms of institutional factors, the OIC transport corridors either lack good governance or do not have governance.

In terms of the trade facilitation area, many non-physical barriers such as unofficial payments and cumbersome border crossings characterize OIC transport corridors. Low intra trade also characterizes the OIC transport corridors and the average is less than 10% of the total trade, while this figure is 50-60% in the EU.

In terms of internal security and especially legal liability, particularly with regard to liability for damage, theft and other causes of loss, is not yet well developed in OIC transport corridors. As such, commercial risks and insurance premiums are high, and as a result so are trading costs. This situation partly explains why the OIC corridor countries trade mainly with Europe and the rest of the world (where legal liabilities are more advanced) than with the neighboring countries.

A common characteristic of OIC transport corridors, in terms of technical and operational factors, is a significant shortage and underutilization of rail infrastructure. Low interoperability and a lack of interconnections are the main challenges, although these are not only the domains of the OIC corridors. Several TEN-T corridors are still facing road and rail interoperability issues.

Environmental and energy efficiency issues are almost absent in the OIC transport corridor development, most likely due to wide availability of oil. Whilst oil remains affordable, alternative fuels are viewed as expensive and unnecessary.

The report highlighted the major challenges faced by OIC Member Countries in terms of transnational transport corridors as follows:

- Limited awareness of relevant stakeholders, especially at the decision maker level,
- Weak political will among the enroute countries,
- Inadequate cooperation and coordination among the enroute countries including lack of a common framework and management system.
- Lack of diversified Transnational Transport Strategies/Policies targeting the various needs of private sector,
- Inadequate, inaccurate, or outdated information about the operations concerning transnational transport corridors and effective data collection system,
- Low interoperability and lack of interconnections.
- Sub-optimal balance of traffic between road and rail,
- Political issues between the countries that result in trade restrictions and bottlenecks at border crossing points,
- Ensuring the sustainability of transport corridor infrastructure in terms of road maintenance and crucially averting significant losses in asset value,
- The high cost of insuring cargo in transit.

In order to address these challenges the research report identified significant policy recommendations to be implemented by the member countries. The report is available on the COMCEC website. (www.comcec.org)

As the main output of the meeting, some important political recommendations were formulated as follows:

Policy Recommendations:

In light of the above-mentioned challenges and problems, TCWG came up with a set of policy recommendations, which are critical for ensuring the smooth functioning of the existing transnational transport corridors in the OIC Member Countries.

1. Political and institutional factors

- Transforming transport routes to transport corridors with a permanent secretariat or strengthening the capacity of the established Secretariats,

- Developing a Corridor Treaty template as a benchmark for the utilization of enroute countries,
- Increasing awareness of the decision makers regarding the need for enhanced cooperation and coordination as well as shared responsibilities to improve the overall performance of the transnational transport corridors,
- Establishing national committees for trade and transport facilitation, comprising different ministries and stakeholders.

2. Economic, financial and social factors:

- Promoting simplification and streamlining of business processes/procedures among the enroute member countries including payments at the border crossing points or pre-payments in advance of reaching the borders,
- Increasing awareness of public and private stakeholders about the potential economic benefits of transnational transport corridors,
- Utilizing international resources including COMCEC Project Funding Mechanism to promote establishing corridor secretariats,
- Promoting "through railway tariff" among the countries along the corridor,
- Preparation of a master plan for the development of transport corridors including short, medium, and long term financing requirements,
- Engaging the private sector to develop, finance and manage transport corridor infrastructure in partnership with the public sector,
- Encouraging intra-trade and investments with a view to enhancing movement of people and work opportunities as well as reducing poverty along transport corridors.

3. Trade Facilitation:

- Reviewing the existing trade agreements to identify relevant factors to remove non-physical barriers to trade,
- Stimulating intra-trade to increase demand towards the transnational transport corridors in the OIC region,
- Increasing the efficiency of customs inspection by creating One Stop Border Posts, utilizing risk management techniques (such as ASYCUDA system), green channeling and new technologies in customs,
- Developing an efficient trade statistic collection system,
- Promoting Single Window Systems,
- Facilitating visa issuance for business people and visa stickers for drivers.

4. Safety, security and legal liability:

- Implementing the security-building measures/programs throughout transport corridors,
- Enhancing sharing experiences in road safety,
- Building road side service stations including rest areas to improve drivers' welfare and minimize fatigue,
- Promoting multimodal legal liability.

5. **Technical and operational factors:**
   - Improving the design standards of road and rail infrastructure including road/rail transfer nodes, gauge changing system, and border crossings,
   - Ensuring the sustainability of transport corridor infrastructure including the maintenance of roads through the application of appropriate user charges,
   - Harmonization of vehicle/operational standards, e.g. vehicle weights and dimension, and gross vehicle mass,
   - Improving rail interoperability including a common driver licensing/certification and common conditions of carriage,
   - Improving communications along the corridor including fibre optic cable and cargo tracking,
   - Improving logistics infrastructure, such as multiple-user warehouses through enhanced coordination and cooperation among the relevant stakeholders,
   - Increasing the number and quality of logistics centres along the corridors.
6. **Environmental and energy factors**
   - Promoting intermodal transport particularly encouraging the use of rail and maritime transport through investments in efficient mode transfer facilities,
   - Stimulating the use of more environmentally friendly vehicles and vessels through incentives and regulation, for reducing carbon emissions and air pollutions along the corridor.
7. **Corridor Performance Monitoring**
   - Developing a data collection system along the corridors including but not limited to:
     - trade volumes and composition, including the movement of hazardous cargos
     - traffic flow and composition
     - journey time and vehicle speed
     - border crossing processing times
     - transit costs and fees
     - road accidents,

- Analyzing and disseminating the above-mentioned data for reporting on the performance of transport corridors and the implementation of the above policies.

COMCEC Project Funding Mechanism

Through its Project Funding Mechanism, the CCO provides grants to the selected projects proposed by the relevant OIC institutions and Member States that have already registered for the Transport and Communications Working Group.

In 2016, Turkey implemented the project, "Assessment and Enhancement of Air Cargo Interconnectivity among the OIC Member States: the Air Cargo Co-modality Approach (ACCMA) to Facilitate Intra-OIC Trade". This Project included desk based studies together with field visits to selected countries and a panel organization in Istanbul. During the desk-based studies, by utilizing several industry specific databases the gravity centers for air trade and air cargo were identified. Taking into account the gravity centers as well as existing and future air traffic, three pilot member states (Mozambique, Tunisia and Malaysia) were identified for further analysis and field studies. The Air Cargo Panel was held in Istanbul from December 14-16, 2016, with the participation of partner countries. Finally, a report was prepared at the end of the project proposing recommendations for the selected case countries as well as all OIC countries. Among the suggestions of the report was the establishment of freighter service networks among sub-regions, setting up a sustainable demand structure and facilitating a regularity framework.

In 2017, Cote d'Ivoire implemented the project, "Improving the Capacity on Road Safety in Côte d'Ivoire, Burkina Faso and Mali." The aim of this project was to raise awareness of the individual risk factors in road safety and to propose solutions. The project included the preparation of trainers for three countries and a pilot campaign for Cote d'Ivoire. Within the framework of the training program in Côte d'Ivoire, experts from three countries convened in order to provide solutions about individual risk factors in road safety and to formulate messages regarding the pilot campaign that would subsequently be organized in Côte d'Ivoire. During the campaign, organized in various cities of Côte d'Ivoire during July 10-17, 2017, the drivers of heavy vehicles were informed about individual risk factors in road safety. In addition, some promotional materials that involve messages about road safety were distributed to the drivers.