

Proceedings of the 21st Meeting of the COMCEC Transport and Communications Working Group

"Measuring the Environmental Impacts of Transport Infrastructures in OIC Member Countries"



PROCEEDINGS OF THE 21st MEETING OF THE COMCEC TRANSPORT AND COMMUNICATIONS WORKING GROUP ON

"Measuring the Environmental Impacts of Transport Infrastructures in OIC Member Countries"

(12-13 October 2023)

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Introduction

The 21st Meeting of the COMCEC Transport and Communications Working Group was held in Ankara on 12-13 October 2023, with the theme of "Measuring the Environmental Impacts of Transport Infrastructures in OIC Member Countries".

The meeting was attended by the representatives of Member States, namely; Azerbaijan, The Gambia, Iran, Iraq, Oman, Saudi Arabia, Sudan, Togo, Tunisia, and Türkiye. The meeting was also attended by the representatives of the United Nations Economic Commission for Europe (UNECE), Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC), and Islamic Development Bank (ISDB).

During the meeting, the experts from the Member States exchanged their experiences, achievements, and challenges regarding the environmental impacts of transport infrastructures in their respective countries.

Furthermore, they have deliberated on the global trends concerning how to assess the environmental effects of transport infrastructures and best practices and challenges faced in the OIC Member Countries.

The meeting has mainly elaborated on the findings of the Guidebook Report "Measuring the Environmental Impacts of Transport Infrastructures in OIC Member Countries" conducted by the CCO. The meeting also considered the Guide describing the process for effective assessment of environmental impacts of transport infrastructure and the policy recommendations developed based upon the main findings of the Guidebook Report. The meeting came up with solid policy recommendations to be submitted to the 39th Ministerial Session of the COMCEC for their adoption.



1. Opening Remarks

The meeting started with a recitation from the Holy Quran. At the outset, Mr. Selçuk KOÇ, Director General of the COMCEC Coordination Office, briefly introduced the COMCEC and its activities as well as highlighted the importance of the theme of environmental impacts of transport infrastructures.

Mr. KOÇ stressed the significance of transportation for the production and distribution of goods as well as ensuring the everyday mobility of people. He mentioned that adequate infrastructure is a fundamental precondition for well-functioning transport systems. Along with the growing demand for transport infrastructures, the necessity for investing in transport infrastructures also increases.

Mr. KOÇ also highlighted the fact that along with its positive impact on economic growth and social well-being, the rapid growth of the transportation sector may result in significant environmental impacts. In this respect, it is essential to consider the environmental impacts associated with transport infrastructure development and transport operations. He underlined that excessive consumption of energy resources, wastes polluting the environment, noise, traffic congestion, and traffic accidents are some of the negative environmental and social effects of the transportation sector.

Furthermore, Mr. KOÇ underscored that the formulation and implementation of transportation and environmental policies in a harmonious and coordinated manner may be a decent response to address the negative environmental impacts of transport infrastructure. With this framework, it is highly underlined that measuring the environmental impacts of transportation infrastructures based on an accurate methodology and solid model would play a vital role in establishing evidence-based policies for combatting adverse impacts of transport infrastructures on the environment.

Lastly, Mr. KOÇ stated that having an applicable guide describing how to measure the environmental effects of transportation infrastructures both from technical and procedural perspectives is essential. In this respect, the Guidebook prepared for this Meeting would be an important input for the Member Countries in the assessment of environmental impacts of their transport infrastructure.

Afterward, Mr. Mehran KHAMISIZADEH, Advisor, Ministry of Roads and Urban Development of the Islamic Republic of Iran chaired the Meeting. Mr. KHAMISIZADEH welcomed the participants and expressed his appreciation to the delegations for their participation.



2. COMCEC Transport and Communications Outlook

Mr. Nihat AKBALIK, Senior Expert at the COMCEC Coordination Office, delivered a presentation on the main findings of the COMCEC Transport and Communications Outlook. At the outset, Mr. AKBALIK underscored the importance of the transport and communications sector as one of the six cooperation areas specified by the COMCEC Strategy. This is followed by emphasizing the relationship between transport, logistics, and trade and how they affect each other.

Mr. AKBALIK continued by providing figures with regard to international trade and transportation, such as the Logistics Performance Index (LPI), Liner Shipping Connectivity Index (LSCI), the burden of customs procedures, and quality of transport infrastructure. With respect to the quality of transport infrastructure, he emphasized that both OIC overall and OIC-Sub-Saharan Africa averages fall below world averages in each measure. OIC-MENA performs better than the world average except for the quality of railroad infrastructure. On the other hand, OIC-Asia underperforms than world averages in each measure except the quality of railroad infrastructure.

While explaining the LSCI scores, Mr. AKBALIK mentioned that Malaysia, UAE, Morocco, and Egypt are well connected to the global shipping network whereas Albania, Brunei, Guinea Bissau, and Guyana are the least connected. The best-performing countries have large transshipment ports (e.g. Malaysia, Morocco, and Egypt) and gateway ports (e.g. Malaysia, Saudi Arabia, and Türkiye). On the other hand, the least performing countries are either not located on the mainliner shipping services or lack the physical and operational capacity to serve large container ships. In terms of average LSCI scores, the OIC-MENA region performed better than the OIC-Asia region as well as the world starting from 2008. However, average LSCI scores for the OIC-Sub-Saharan Africa region remained well below the world averages throughout the same period.

Mr. AKBALIK emphasized the large variation in the density of rail networks in different OIC countries. He said that a great majority of the OIC countries have less than 1,000 km of rail lines per $100,000~\rm km^2$ of land area, while almost half of the OIC countries have no railway network. The average network density of the OIC Member Countries is equal to 426 km of railway per $100,000~\rm km^2$ land area.

Furthermore, he added that the container throughput of the OIC countries reached 101 million TEU in 2014 up from 79.8 million TEU in 2010. However, the share of OIC Member Countries in the global container throughput had remained flat at around 15% during the period between 2010 and 2014.



Regarding air traffic, Mr. AKBALIK mentioned that high-income Gulf countries, such as Qatar, UAE, and Bahrain, and island states, such as Brunei Darussalam and Malaysia, have higher per capita air passenger traffic figures. Besides, the OIC Member Countries with dominant network airlines are more likely to experience higher per capita air passenger traffic.

Mr. AKBALIK continued his presentation by highlighting the environmental effects of the transport sector. He stated that there is a positive correlation between transport-related CO2 emissions and GDP per capita (PPP) in the OIC Member Countries. One reason for this tendency is the increased private car ownership with increasing per capita income, which eventually increases personal trips and accordingly Greenhouse Gas (GHG) emissions. Another fact is that the countries with higher GHG emissions are mostly oil-producing countries, which often corresponds with lower pump prices for gasoline and consequently more road sector energy consumption. He emphasized some policy options to mitigate transportation-related GHG emissions as follows;

- Enhancing fuel efficiency (increasing engine efficiency, employing lighter and safer materials)
- Using alternative fuels (biofuels, natural gas, and electricity)
- Adopting environmental pricing (polluter pays principle, environmental pricing schemes: increasing the gasoline taxes, congestion pricing, etc.)
- Shifting from private car use to environmentally-friendly transport modes (non-motorized travel, public transit through buses, light rail system, and metro)
- Adopting traffic restrictions (restrictions based on number plates, high occupancy vehicle lanes, congestion pricing schemes, and new plate quotas)

Mr. AKBALIK concluded his presentation by emphasizing the importance of tailor-made solutions rather than generalized policies for the development of the transport sector in the Member Countries.

3. Environmental Impacts of Transport Infrastructure: Conceptual Framework and Global Trends

Mrs. Rana AKBAŞ, Sustainability Manager at Escarus, presented the scope, objectives, planned outputs, and the path followed during the project timeline. Then she provided with participants the conceptual framework and global trends within the scope of the "Guidelines for Measuring the Environmental Impacts of Transport Infrastructures in OIC Member Countries".

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Referring to the inevitability of transport for daily life, Mrs. AKBAŞ stated that priority should be given to reducing the negative environmental impacts of transport. Subsequently, she drew attention to the importance of recently developed policies and approaches in measuring and reducing the impacts of the transport sector. Mrs. AKBAŞ stated that with the commitment of the countries to the Net Zero Target in line with the Paris Agreement, the demand for mobility and transport systems tends towards efficient and low-emission transport modes, and added that despite the projected increase in transport demand, the emissions of the transport sector should be reduced in the Net Zero Scenario and that the sector will react quickly with this reduction.

Mrs. AKBAŞ presented the distribution of CO_2 emissions by sectors worldwide to the participants via a table. She stated that the transport sector has a share of 15% immediately after the agriculture sector and that the basis of this share is fuel consumption and Greenhouse Gas (GHG) emissions from road transport. Mrs. AKBAŞ mentioned that vehicles consume large amounts of energy, cause noise pollution and many pollutants such as CO_2 and nitrogen oxides, and potentially damage ecosystems and biodiversity. On the other hand, Mrs. AKBAŞ also mentioned that during the construction phase of transport infrastructures, damages caused by the energy use of construction machinery, destruction of forests and agricultural areas, and changes in habitats and biodiversity have profound, severe impacts on the environment. She added that the environmental problems caused by transport infrastructure are heavily dependent on the network, mode of transport, and traffic conditions.

Furthermore, Mrs. AKBAŞ stated that the environmental impacts of transport infrastructures can be categorized under three headings: direct, indirect, and cumulative. While direct impacts include noise, waste, air emissions, and land use problems arising from transport infrastructure activities or constructions, the indirect impacts can be defined as secondary or tertiary impacts. On the other hand, the cumulative impacts can be identified as the combined and multiplying effects of transport activities on ecosystems such as climate change taking into account the complex causes and effects arising from both direct and indirect impacts.

Following this information, Mrs. AKBAŞ continued with the components of the project undertaken. She stated that in addition to the literature and desk research, field research was carried out by visiting two OIC Member Countries, Malaysia and Jordan. The significant findings emanating from the field studies and the best practices from various OIC Member Countries revealed through the survey conducted have provided important insight to produce the guide on how to measure the impacts of the environmental impacts of transport infrastructure.



In conclusion, Mrs. AKBAŞ summarised the key findings considering what is experienced in the literature studies throughout the project, the observations gained during the field visits, and good practices as follows;

- 1- Collaborate with Experts: Partner with environmental experts and researchers to strengthen the scientific foundation of projects. For instance, ecologists can help identify sensitive ecological zones near proposed routes, guiding planners to choose ways that minimize harm to local ecosystems.
- 2- Embrace Green Technologies: Adopt innovative solutions like electric buses to reduce air pollution significantly. Integrating these technologies makes it possible to decrease the carbon footprint and establish a model for sustainable urban development.
- 3- Use Nature-Based Solutions: To mitigate environmental impact, incorporate nature-based solutions, such as green roofs and urban forests. For example, constructing noise-absorbing green walls along highways reduces noise pollution and enhances the infrastructure's visual appeal.
- 4- Foster Multi-Stakeholder Partnerships: Partner with NGOs, local communities, and private sectors to amplify impact. Collaborate with environmental NGOs for initiatives like reforestation drives near newly constructed roads, enhancing community involvement and project outcomes.
- 5- Ensure Continuous Monitoring and Adaptation: To ensure continuous monitoring of the project's impact on air quality, noise levels, and ecology. Immediate adaptive measures, like altering routes causing unexpected disturbances, maintain harmony with the environment. If, for instance, a new highway leads to random disorders in a bird sanctuary, adaptive measures can be taken quickly.
- 6- Introduce Financial Incentives for Green Choices: Introduce financial incentives, such as tax breaks for companies with electric vehicle fleets, encouraging the private sector to contribute to environmental conservation efforts. For instance, tax breaks for companies employing a certain percentage of electric vehicles in their fleets can encourage the private sector to contribute to environmental conservation efforts.

Afterward, Mr. Dr. İsmail Çağrı ÖZCAN, team member of the project, made his presentation about examples of global trends in transportation and environment linkage. First, the valuation of emissions in the Aydın Çıldır Airport Feasibility Study has been explained to participants through its calculation table.

Mr. ÖZCAN, to present the case study of the United Kingdom (UK) within the scope of the project, explained to the participants why the UK was taken as an example. Then he gave information about the transport-environment linkage of the UK. He summarised impact assessments, environmental values, and land value increases through tables.



Mr. ÖZCAN made an illustration for a railway project and presented examples of noise pollution and air quality through this project. Then he gave a model for a transport company and explained the CO_2 emissions for this company. After mentioning the minimum emission standards for low emission zone (LEZ) and ultra-low emission zone (ULEZ) in the UK, Mr. ÖZCAN shared the lessons learned from the UK case study with the participants.

4. Lessons Learnt from the Selected Case Studies and the Policy Options

Another team member of the project, Mr. Dr. Volkan Recai ÇETİN presented the lessons learned from the selected case studies and the policy options at this meeting stage. Addressing the Transport-Environment link in Malaysia, Mr. ÇETİN presented the changes in CO_2 emissions in Malaysia between 1972 and 2012, energy consumption by sectors, distribution of CO_2 emissions between transport modes, roles of government agencies, and EIAs used in Malaysia.

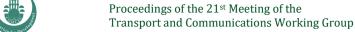
After the Malaysian case, Mr. ÇETİN moved on to the Jordan case study and gave general impressions about the transport sector in Jordan. Referring to Jordan's environmental policies and regulations, Mr. ÇETİN explained the CO_2 emissions by sectors in Jordan on a graph. Mr. ÇETİN expressed that while Jordan has a 31% Greenhouse Gas (GHG) reduction target by 2030, sustainable transport initiatives are gathered under the headings of promoting public transport, establishing a national railway network for freight and passenger transport, and replacing fossil fuel vehicles with electric or hybrid vehicles. Finally, he mentioned the environmental impact assessment process in Jordan.

Mr. ÇETİN presented the survey results in the last part of his presentation. He talked about the target group of the survey and explained how many people from which countries participated in the survey and the answers to the questions/questions. He then presented the lessons learned and policy recommendations.

5. Member States' Experiences in Measuring Environmental Impacts of Transport Infrastructures

a. Türkiye

Ms. Canan Esin KÖKSAL, Senior Environmental Expert, Ministry of Environment, Urbanization and Climate Change, presented the experience of Türkiye specifically on green transition for the transportation sector. She started by mentioning the air pollutants from





transportation. At the outset, she highlighted that Türkiye ratified the United Nations Convention on Long-Range Transboundary Air Pollution (CLRTAP) in 1983 and the EMEP Protocol in 1985 and thus has to report emission data annually. As a party to the Convention and EMEP Protocol, the National Air Pollutants Emission Inventory has been reported since 2012. She stated that the COPERT software, which is recommended under Reporting Guidelines, is mainly used for reporting and this software is directly integrated into the HEY Portal which was developed for Türkiye's emission calculation and electronic emission database.

Ms. KÖKSAL continued her presentation by explaining some current tasks for transportation and mobility such as the Electronical Exhaust Emission Measurement Monitoring System (EGEDES), Intercity Bicycle Path Master Plan, and Green Data Portal. She underlined that the legislative process for the determination of rules and procedures for escooters and the establishment of the Low Emission Zone is still ongoing. Moreover, she highlighted that the process for electric or hybrid street cleaning vehicles and mass transportation and commercial fleets to be extended with electric or hybrid vehicles is under development.

Ms. KÖKSAL ended the presentation by touching upon the plans and programs of Türkiye concerning the green transition in the transport sector. She outlined that according to the Presidency Action Plan, 3.000 km of bicycle paths and 3.000 km of walking paths, 60 km of environmentally friendly streets, and a 60.000-m² noise barrier are planned to be constructed/structured to have "Greener Cities" in Türkiye.

Afterward, Ms. Burcu ALIYAZICIOĞLU, ATAŞ, Manager, Environmental and Social Affairs, made a presentation on behalf of the Ministry of Transport and Infrastructure of Türkiye, concerning the Eurasia Tunnel Project.

At the beginning of her presentation, she provided an overview of the project. She mentioned that the project has been realized as a Build-Operate-Transfer model for a 25-year operation period. Being fully operational by 22.12.2016, the total investment for the Eurasia Tunnel Project is over \$1,245 Billion and the traffic capacity is 120,000 vehicles/day.

Ms. ALIYAZICIOĞLU continued her presentation with an environmental and social impact assessment of the Eurasia Tunnel Project. She underlined that in addition to the requirements of national regulations about Environmental Impact Assessment (EIA), international standards particularly Equator Principles, IFC, EBRD and EIB Environmental and Social Performance Requirements and OECD Common Approach have been taken into consideration while conducting environmental and social impact assessment of the project.

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She underlined the main subjects elaborated in the environmental and social impact assessment of the project as follows;

- Health and Safety
- Resources and Wastes
- Air Quality
- Land Acquisition
- Vegetation and natural habitat
- Noise and Vibration
- Archaeology and Cultural Heritage
- Stakeholder Engagement

After giving detailed information regarding each subject in question, she emphasized that the above-mentioned environmental and social impact assessment of the project was awarded as "Environmental and Social Best Practice Award, 2015" by the European Bank for Reconstruction and Development (EBRD).

Furthermore, Ms. ALIYAZICIOĞLU gave some information on the sustainability goals of the Eurasia Tunnel Project. She mentioned that the Operations & Maintenance (O&M) building of the Eurasia Tunnel is designed as a LEED Gold Certified Green building. It is managed by energy saving, recycling, and sustainability criteria and so the Building was awarded with LEED Gold Certificate in 2017 by the US Green Building Council. She outlined that a roof solar panel system that has a 240 kWe capacity will be installed on the said Building and Ventilation Building Asia roof within the year 2023.

Concerning the carbon footprint of the Project, she highlighted that Eurasia Tunnel equalized the carbon footprint of its operational activities. All of the electricity consumed in tunnel operations is met from renewable sources and it is certified with the I-REC International Renewable Energy Certificate every year, thus helping to reduce the carbon footprint caused by electricity needs. ISO 14064 Carbon Neutral Certificate was received for 2021.

Ms. ALIYAZICIOĞLU continued her presentation with some explanations of the innovations in the Eurasia Tunnel Project. She explained that the Pacemaker Application is regulating the traffic flow speed as 70 km reduced sudden speed changes by 69% in the deepest point at the end of one year. No traffic accident occurred in the area of application where the traffic efficiency increased by 8.5% while traffic congestion was reduced by about 53%. She stated that with this application, the exhaust emissions were reduced by almost 12% contributing to the prevention of environmental pollution. As another innovation of the Project, she mentioned the LED lighting and ventilation optimization in the tunnel by saying



that the LED lighting system not only reduces energy consumption but also allows drivers to easily adapt to the tunnel and daylight at the entrance and exit of the tunnel.

Ms. ALIYAZICIOĞLU completed her presentation with some information about the Blue Dot Network Certificate of the OECD and Eurasia Tunnel Project state according to the requirements of this certificate. She mentioned that this certificate is a mechanism to certify infrastructure projects that meet robust international quality standards with respect to environment, social, economic, and governance. The United States (US), Japan, Australia, the United Kingdom (UK), and Spain launched the Blue Dot Network as a multilateral effort to promote principles of sustainable infrastructure development around the world. The Eurasia Tunnel Project was selected as a pilot project of Blue Dot Network from among over 20 proposals. The project completed piloting progress in April 2023 after a 3 monthauditing process by the OECD. An official certificate is expected to be received in Q1 of 2024 following the establishment of the Blue Dot Network Certificate secretariat.

- 6. Private Sector's/International Organizations' Perspectives
- a. UNECE: "Environmental Impact Assessments in Transport Sector: UNECE's Experiences"

Ms. Fadiah ACHMADI, Economic Affairs Officer, at the United Nations Economic Commission for Europe (UNECE), made a presentation with the theme "Environmental Impact Assessments in Transport Sector: UNECE's Experiences".

In the first part of her presentation, Ms. ACHMADI made a brief introduction to the UNECE and its mandate. She mentioned that the UNECE, as one of the five United Nations (UN) regional commissions, facilitates greater economic integration and cooperation and promotes sustainable development and economic prosperity through policy dialogue, development of legal instruments norms, and standards, exchange and application of best practices as well as technical cooperation. In this respect, the UNECE Sustainable Transport Division develops methodologies, guidelines, and definitions on transport subjects while hosting the secretariat of the UN Secretary-General's Special Envoy for Road and the secretariat of the United Nations Road Safety Fund (UNRSF) at the same time.

Afterward, Ms. ACHMADI mentioned that surpassing improvements in fuel efficiency, modal share, and vehicle fleet electrification, motorized mobility's rising demand poses a challenge. Developing a new value chain and market for low-carbon construction and manufacturing products was highlighted as an essential step toward tackling the said challenges.

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Furthermore, concerning the endeavors under the UNECE with respect to developing green, sustainable, and resilient transport infrastructure, Ms. ACHMADI stated that a roundtable forum meeting was held under the UNECE to discuss the questions of how to enhance transport infrastructure resilience to climate change impacts. According to the outcomes of this Forum Meeting, there are five aspects to achieve the goal namely; transition to clean energy, reduction in demand, enhanced material recycling, innovative manufacturing solutions, and optimizing existing transport assets.

Ms. ACHMADI continued her presentation by mentioning the significance of data and analysis tools in fostering informed policy decisions. The statistics in the database are considered the primary hub for statistics and collection from national databases, which helps in the estimation of emission-saving infrastructure. She also stated that the "ForFITS Model" under the UNECE provides a robust framework for analyzing diverse sustainable transport development scenarios. This model puts forward the possibility for estimation of emissions savings potential from future implementation and is free for all UN Member States and Organizations.

Regarding the importance of Electric Vehicles (EVs) in the reduction of environmental impacts of transport, Ms. ACHMADI mentioned the UNECE's efforts in promoting the development of EV charging infrastructure as well. She provided certain statistics about CO_2 emissions from Electric Vehicles from the Great Britain case study, which reveals significant environmental benefits in comparison to fuel-based vehicles.

Lastly, Ms. ACHMADI highlighted the need for a model shift to shape travel demand and mobility patterns in the transportation sector. She outlined that the promotion of energy conversion from fuel to electricity with some applicable pricing schemes would be an essential step for improvements in decreasing the environmental impacts of transport infrastructure.

b. IsDB: "IsDB's Experiences in EIA Process for Transport Projects"

Mr. Cem Galip ÖZENEN, Senior Operations Officer at the Islamic Development Bank (IsDB), made a presentation with the theme "IsDB's Experiences in EIA Process for Transport Projects".

At the outset of his presentation, Mr. ÖZENEN briefly introduced the IsDB and its activities in the field of the transportation sector. He mentioned that the IsDB is working towards public sector financing, capacity development, and technical cooperation in particular reverse linkages. He shared with participants some statistical data related to the IsDB Group operations in some specific sectors between the years of 2019 and 2023.



Mr. ÖZENEN continued his presentation by explaining the IsDB Group's realigned strategy. According to this strategy, driving green economic growth is one of the strategic objectives and green, resilient, and sustainable infrastructure is considered the first pillar of this objective. Mr. ÖZENEN highlighted the IsDB Group's efforts in the transport sector particularly the study titled "*Transport Sector Policy: Sustainable Transport for Inclusion and Prosperity*". He said that this study proposes a transition to clean and low-carbon types of transport. He also underscored that environmental concerns and measures especially in the transport sector are critical for achieving Sustainable Development Goals (SDGs), which requires all actors in the process.

Furthermore, concerning the IsDB's approach to the selection of the projects, Mr. ÖZENEN underlined that instead of making an environmental and social assessment, preparing an analysis of the environmental and social implications of the project is a prerequisite for a client to be funded by the IsDB. He also mentioned other studies and reports published with the contribution of the IsDB.

Moreover, Mr. ÖZENEN explained the IsDB's project cycle in detail. According to this project cycle, initially, strategic development plans of countries and SGDs are reviewed for environmental and social impacts. Then, the due diligence process takes place as the second phase of the cycle. Afterward, the Project Implementation Assessment and Support Report (PIASR) phase starts through which several activities are conducted such as site visits, progress reports, etc. in order to monitor the outcome of the project. Then after the implementation of the project, an assessment phase takes place in order to put forward the lessons learned through independent evaluations. Mr. ÖZENEN ended his presentation by embodying this cycle with an example case of a training project from the Arab Republic of Egypt.

7. COMCEC Project Support Programs

Mr. Mehmet Celalettin AKTAŞ, Head of Programs and Projects Department at COMCEC Coordination Office, delivered a presentation on the COMCEC Project Funding (CPF), COMCEC Covid Response Program, and COMCEC Al-Quds Program for the transport-related projects of the Member Countries as well as the OIC institutions.

Concerning the COMCEC Covid Response Program, Mr. AKTAŞ mentioned that the implementation phase started in 2021. This program has been designed by considering the effects of the Covid-19 Pandemic. This is the second and final implementation year of this program.

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Regarding the COMCEC Al-Quds Program, Mr. AKTAŞ said that it has been initiated based on the decisions taken in the previous COMCEC Ministerial Meetings as well as Extraordinary Islamic Summits. The program is carried on in cooperation with the Palestinian authorities and this program aims at improving the capacity of Al-Quds considering the specific economic needs of the region as well as the institutional and human capacity of the relevant stakeholders. The program mainly focuses on tourism, cultural heritage, and destination development, and it also consists of several interrelated projects which will be executed in the following years.

Then, he provided some details regarding the COMCEC Project Funding and highlighted that the COMCEC Project Funding is a grant-based financing mechanism introduced by COMCEC Coordination Office in 2014 as a policy support instrument under the COMCEC Strategy. The main purpose is to enhance cooperation and solidarity among the Member Countries, support the implementation of Policy Recommendations adopted by the COMCEC Ministerial Sessions, and increase institutional and human capacity. Mainly activity-based projects are supported under this program. These projects include the activities such as training, seminar, workshop, study visit, publicity meetings etc.

Concerning the novelties in the COMCEC Project Funding, he said that two new project types peer-to-peer experience sharing and needs assessment are added to the previous type of activities. Peer-to-peer experience sharing is an activity that is conducted by the technical expert(s) from the PO country in a host country to share experiences and collect information and data in the host country. The main aim is to acquire knowledge and experience in the selected sectoral theme. A Field Study Report must be produced at the end of the activity. Concerning the needs assessment studies, he said that a study should assess the needs of the project owner Member Country regarding the related sectoral theme as well as propose solutions to overcome the challenges and requirements of the Member Country in the related sector. A Needs Assessment Report must be produced at the end of the Project.

Furthermore, in 2023, a Member Country can implement a project individually. In these projects, Member Countries can propose projects to address the challenges faced in their respective countries. For these projects, the POs are required to elaborate on the specific issues regarding the challenges faced by the country on the selected theme. He continued his presentation with the implementation statistics, both yearly and on a sectoral basis, for the last 10 years. Besides, he gave the details of the contents and activities of the Transport and Communications projects implemented so far. Lastly, he gave general information about the relevant pages of the COMCEC Project Funding website and mentioned the timeline for the project submission. He indicated the relevant reference materials in the Online Project Submission System to be used during the project submission period.



8. Policy Debate Session on the Guide "Measuring the Environmental Impacts of Transport Infrastructures" and Policy Recommendations

Mr. Mehran KHAMISIZADEH, Advisor of the Ministry of Road and Urban Development of the Islamic Republic of Iran and COMCEC Transport and Communications Working Group (TCWG) Focal Point of Iran, moderated the roundtable session.

At the outset, Mrs. AKBAŞ delivered a presentation on the guide including basic principles and process management with respect to measuring the environmental impacts of transport infrastructure. She explained the basic impact assessment steps through graphics. Afterward, she mentioned the importance of preparing a preliminary environmental impact assessment for transport infrastructure in the OIC Member Countries before project implementation. Then, Mr. Nihat AKBALIK made a short introduction on the draft Policy Recommendations and their rationalities, which was circulated by the CCO prior to the Meeting.

After thorough discussions and comprehensive deliberations, the Working Group has come up with the following policy recommendations¹ to be submitted to the 39th Ministerial Session of the COMCEC for adoption.

- Policy Recommendation I: Developing/Improving a comprehensive system and institutional structure through a sound legal and regulatory framework as well as guidelines for better measurement and assessment of environmental implications of transport infrastructure.
- Policy Recommendation II: Improving costs-benefit analyses through among others incorporating environmental costs and benefits during the planning phase of transport infrastructure.
- Policy Recommendation III: Improving the quality of transport infrastructure projects' data and statistics for measuring the environmental impacts
- Policy Recommendation IV: Making use of ex-post analysis through statistical comparisons and qualitative assessments for mitigating environmental impacts of transport infrastructure.
- Policy Recommendation V: Enhancing institutional and human capacity through improved regulatory policies and special training with a view to improving the quality of measurement and assessment of transport infrastructure projects

¹ The Room Document is attached as Annex 3.



 Policy Recommendation VI: Promoting more environmentally friendly transport modes and technologies to reduce their negative effects on the environment

Closing Remarks

The Meeting ended with closing remarks of Mr. Mehmet Celalettin AKTAŞ, Director at the COMCEC Coordination Office (CCO). He thanked all the participants for their attendance and contributions. He encouraged the Member Countries to share their views, comments, and critiques, if any, about the Guidebook Report via e-mail to the Secretariat. Furthermore, he announced that the next 22nd Meeting of the Transport and Communications Working Group will be held on April-May 2024 with the theme of "Developing Intelligent Transportation Systems (ITS) in the OIC Member Countries".

Mr. Mehran KHAMISIZADEH, the Chairman of the Meeting, also thanked all the participants for their active contributions to the Meeting.



Annex 1: Agenda of the Meeting



21st MEETING OF THE COMCEC TRANSPORT AND COMMUNICATIONS WORKING GROUP

(October 12-13, 2023)

"Measuring the Environmental Impacts of Transport Infrastructures in OIC Member Countries"

AGENDA OF THE PROGRAMME

Opening Remarks

- 1. "Measuring the Environmental Impacts of Transport Infrastructures in OIC Member Countries" (Scope, Methodology, Conceptual Framework and Global Trends)
- 2. Lessons Learnt from the Selected Case Studies
- **3.** Experiences/Perspectives of the Member States, International Institutions, NGOs, and Private Sector on the Subject
- **4.** COMCEC Project Support Programs
- **5.** Policy Debate Session: Formulation of Policy Recommendations for the 39th COMCEC Ministerial Session

Closing Remarks	

Annex 2: Program of the Meeting



PROGRAMME OF THE MEETING 21st MEETING OF THE COMCEC TRANSPORT AND COMMUNICATIONS WORKING GROUP

(October 12-13, 2023, Ankara)

"Measuring the Environmental Impacts of Transport Infrastructures in OIC Member Countries" (2nd Session - Final Draft of the Guide Report)

1st DAY: OCTOBER 12, 2023

09:00-09:30	Registration
09:30-09:35	Recitation from Holy Qur'an
09:35-09:45	Opening Remarks
09:45-10:05	COMCEC Transport and Communications Outlook 2023
	- Presentation by Mr. Nihat AKBALIK
	Senior Expert

10:05-10:15 Discussion

10:15-10:55 Presentation of the Draft Research Report

- Presentation by Dr. İsmail Çağrı ÖZCAN and Ms. Rana AKBAŞ Consultants ESCARUS

COMCEC Coordination Office

10:55-11:05 Discussion

11:05-11:20 Coffee Break



11:20-12:00 Lessons Learnt from the Selected Case Studies and the Policy Options

- Presentation by Dr. İsmail Çağrı ÖZCAN and Dr. Volkan Recai ÇETİN Consultants ESCARUS

12:00-12:30 Discussion

12:30-14:00 Lunch

14:00-15:00 Experiences/Perspectives of the Member States Member States' Experiences in Measuring Environmental Impacts of Transport Infrastructures

- Member States' Experiences in Measuring Environmental Impacts of Transport Infrastructures
- Discussion

15:00-15:15 Coffee Break

Private Sector's/International Organizations' Perspectives

15:15-15:45 Presentation: "Environmental Impact Assessments in Transport Sector: UNECE's

Experiences"

Mrs. Fadiah ACHMADI Economic Affairs Officer United Nations Economic Commission for Europe (UNECE)

15:45-16:15 Presentation: "IsDB's Experiences in Environmental Impact Assessment Process for Projects in Transport Sector"

Mr. Cem Galip ÖZENEN
Senior Operations Officer
Islamic Development Bank (IsDB)

16:15-16:30 Discussion

16:30-17:00 COMCEC Project Support Programs

Presentation by Mr. Mehmet Celalettin AKTAŞ Director COMCEC Coordination Office

Discussion

2nd DAY: OCTOBER 13, 2023

09:30-11:45 Policy Debate Session on the Guide "Measuring the Environmental Impacts of Transport Infrastructures" and Policy Recommendations

11:45-12:00 Closing Remarks and Family Photo

12:00-14:00 Lunch

14:00-16:30 Field Trip/Social Program



Annex 3: The Policy Recommendations of the 21st Meeting of the COMCEC Transport and Communications Working Group

THE POLICY RECOMMENDATIONS OF THE 21st MEETING OF THE COMCEC TRANSPORT AND COMMUNICATIONS WORKING GROUP

The COMCEC Transport and Communications Working Group (TCWG) successfully held its 21st Meeting on October 12-13, 2023, in Ankara, with the theme of "Measuring Environmental Impacts of Transport Infrastructure in the OIC Member Countries". In the Policy Debate Session titled "Formulation of Policy Recommendations for the 39th COMCEC Ministerial Session on Measuring Environmental Impacts of Transport Infrastructure in the OIC Member Countries", on October 13th, 2023, TCWG made deliberations on the policy recommendations related to the environmental impact of transport infrastructure. The policy recommendations were formulated by taking into consideration the research report entitled with the same theme of the above-mentioned meeting. The policy recommendations are as follows:

Policy Recommendation I: Developing/Improving a comprehensive system and institutional structure through a sound legal and regulatory framework as well as guidelines for better measurement and assessment of environmental implications of transport infrastructure.

Rationale:

The connection between transportation and the environment is complex and intertwined. The factors that drive transportation, the actions involved, the outcomes produced, and the ultimate consequences are all interconnected with the environmental effects they create. The environmental impact, including but not limited to GHG emissions, noise, and water pollution, should be quantified resulting from different transportation modes.

Within this framework, it is essential to design standards for transportation infrastructure that prioritize the reduction of negative environmental impacts and the preservation of ecosystems. To achieve this overarching goal, it is crucial to have a comprehensive understanding of the environmental effects associated with transport infrastructure. Therefore, all phases of the infrastructure's life cycle, including construction, operation, and end-of-life, should be thoroughly analyzed in terms of their environmental implications.

To that end, a robust systematic and institutional structure as well as deliberative legal and regulatory framework, and guidelines are needed for effective environmental impact assessment of transport infrastructure, beginning from transport planning, project identification and preparation, ex-ante evaluation, procurement, supervision, and



monitoring, to ex-post evaluation. Various tools and methodologies can be applied in this process. Transport modeling and simulation using advanced tools, cost-benefit analysis, stakeholder engagement, and public participation, Environmental Impact Assessment (EIA), Life Cycle Assessment (LCA), Geographic Information Systems (GIS), and monitoring and measurement techniques are among the important tools and methods being used for that purpose.

Policy Recommendation II: Improving costs-benefit analyses through among others incorporating environmental costs and benefits during the planning phase of transport infrastructure.

Rationale:

Any transport investment project brings costs and benefits to a country. In the planning phase, it is vital to predict the cost and benefit of a transport infrastructure project so as to reveal the feasibility of the project. In this respect, incorporating environmental costs and benefits into cost-benefit analysis (CBAs) is of particular importance during the planning phase of the infrastructure projects. The systematic process of calculating the benefits and costs of transport projects is widely regarded as an essential step in the policy process. It helps decision makers to have a clear picture of how society and the environment would be affected. Monetizing environmental impacts and incorporating the results into the cost-benefit analysis of a transport infrastructure would provide a clearer picture about the feasibility of the project. In this regard, incorporating environmental costs and benefits into the costs-benefit analyses is a vital and useful tool for the efficient use of resources.

Policy Recommendation III: Improving the quality of transport infrastructure projects' data and statistics for measuring the environmental impacts

Rationale:

Reliable, continuous, and accurate data and statistics are key not only for the development of transport infrastructures but also for measuring and predicting their effects on the environment. Transportation infrastructures have environmental impacts ranging from climate change, air quality, and biodiversity to water resources. Environmental impacts incurred by transport infrastructures are basically measured through indicators, but not limited to, greenhouse gas and carbon emissions, energy use and intensity, the share of renewable energy sources in the supply mix, emissions of air pollutants (sulfur oxides (SO_x) , nitrogen oxides (NO_x)), human exposure to fine particulates in the air and related mortality rates and costs, freshwater abstractions, water stress levels, the use of materials, the generation of waste and its recovery, protected areas, forest resources and changes in land cover.



Data and statistics on these parameters shall be regularly produced, updated, and published in terms of domestic, international, and transit transportation separately to make a concrete evaluation of how to minimize the negative environmental impact of the existing systems. In this regard, the implementation of a robust information system including a set of environmental indicators related to transport infrastructure and services is essential. Moreover, the publicity of these data and information is essential for the public to change its demand behavior as well as to open a new path for new investment opportunities from the private sector.

Policy Recommendation IV: Making use of ex-post analysis through statistical comparisons and qualitative assessments for mitigating environmental impacts of transport infrastructure.

Rationale:

To determine whether transport infrastructure projects have affected the region/country as a whole in economic, social, and environmental terms, as was intended before realizing the project, the impacts of the projects should be measured and analyzed meticulously. The forecasts made for a project in the feasibility study could regularly be compared to the realized period after the project is put into operation to determine to what extent forecasts deviated from actual numbers. In this respect, ex-post evaluation is an important tool for determining the deviation and providing insights into the decision-making process, performance, and outcomes of transport infrastructure projects and for informing the public. Systematic ex-post evaluation of large transport projects including updated environmental impact assessments bears great importance for feeding the process for new environment-friendly transport projects. In this respect, having an identified, simple, and systematic ex-post-analysis process is significant for revealing the burden of transport infrastructure projects on the environment after their realization.

Policy Recommendation V: Enhancing institutional and human capacity through improved regulatory policies and special training with a view to improving the quality of measurement and assessment of transport infrastructure projects

Rationale:

Transportation infrastructure has an enormous impact on sustainable development. However, poor planning of transportation infrastructure generates negative effects, such as ecological destruction, increased traffic accidents, climate change, increased CO_2 emissions, and lower transport efficiency. Within this context, measuring the environmental impacts

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of transport infrastructure, as a complex horizontal issue, is of utmost importance for effective planning of transport infrastructure. It requires, in particular, sufficient human resources with the appropriate level of skills, as well as adequate institutional capacity. These skills may be significant, especially in environmental impact assessments, strategy formulation, and goal setting. On the other hand, the environmental impact assessment itself requires sufficient human resources in many areas of technical expertise, environmental science, economics, modeling, etc.

Furthermore, skills in strategic planning –the ability to identify objectives and prepare action plans- are particularly needed, when it comes to minimizing the environmental impacts of transport infrastructure or distributing the efforts over a long period of time. However, a sufficient number of individuals and the required expertise and knowledge shall exist not only in one organization but distributed to many different organizations engaging in this measuring and assessment process. In this respect, having competent institutional and human resources is of vital importance for enhancing the quality of measurement and assessment of environmental impacts of transport infrastructure projects.

Policy Recommendation VI: Promoting more environmentally friendly transport modes and technologies with a view to reducing their negative effects on the environment

Rationale:

To reduce the environmental impacts, there is a global tendency to shift the traffic from road transport to rail transport and private vehicle use to public transportation. Likewise, efforts have been exerted on technological advancements in alternative energy technologies, light but durable vehicle materials, and intelligent transport applications. Therefore, governments should encourage the use of more environmentally friendly transport modes and support the respective R&D efforts towards new technologies.

Instruments to Realize the Policy Advice:

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 Support Programs: 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 projects to be financed by the COMCEC. For the above-mentioned policy areas, the Member Countries can utilize the COMCEC Project Funding and the COMCEC Coordination Office can support financing the successful projects in this regard. These projects may include training programs, study



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visits, workshops, organizing seminars, peer-to-peer experience sharing, needs assessments, and producing promotional materials/documents.



Annex 4: List of Participants

LIST OF PARTICIPANTS

21st Meeting of COMCEC Transport and Communications Working Group (12-13 October, 2023)

A. MEMBER COUNTRIES OF THE OIC

THE REPUBLIC OF AZERBAIJAN

- Mr. Javad MAMMADOV (Advisor, Ministry of Digital Development and Transport)
- Mr. Matlab ALIYEV (Advisor, Ministry of Digital Development and Transport)

THE REPUBLIC OF CAMEROON

Ms. Atyam Nlam Zengue PAULINE (Head of Department, Ministry of Foreign Affairs)

THE REPUBLIC OF CHAD

• Mr. Moustapha NOUR (Counsellor, Ministry of Transport)

THE REPUBLIC OF THE GAMBIA

- Ms. Sainabou HOUMA (Principal Transport Policy Officer, Ministry of Transport, Works & Infrastructure)
- Mr. Sulayman GAYE (Principal Planner, Ministry of Transport, Works and Infrastructure)

THE REPUBLIC OF GUINEA

• Mr. Amadou Dioulde BALDE (Head of Department, National Meterology Institute)

THE REPUBLIC OF IRAQ

- Ms. Esraa HANOUN (Chief Engineer, Ministry of Transport)
- Mr. Hiyam Raheem ABBAS (Assistant Chief Translator, Ministry of Transport)
- Mr. Salah Abdulhasan IBRAHIM (Senior Chief Meteorologist, Ministry of Transport)
- Mr. Mohammad JAMAL (Senior Engineer, Ministry of Transport)



THE HASHEMITE KINGDOM OF JORDAN

- Ms. Abir KHALDI (Head of Air Transport Monitoring and Evaluation Section, Ministry of Transport)
- Ms. Tasnim ABUHAMOUR (Engineer, Ministry of Transport)

THE SULTANATE OF OMAN

- Mr. Saif ALSINANI (Director General of Planning Ministry of Transport, Communications and Information Technology)
- Ms. Fatma ALKHATRI (Road Civil Engineer, Ministry of Transport, Communications and Information Technology)

THE KINGDOM OF SAUDI ARABIA

• Ms. Munirah ALGADIYAN (Senior Expert, Ministry of Transport)

THE REPUBLIC OF TÜRKİYE

- Mr. Mustafa İMAMOĞLU (Head of Department, Ministry of Transport and Infrastructure)
- Mr. Halil KALAYCI (EU Expert, Ministry of Transport and Infrastructure)
- Ms. Canan Esin KÖKSAL (Senior Environmental Expert, Ministry of Environment, Urbanization and Climate Change)
- Ms. Burcu ALIYAZICIOĞLU (Manager, Environmental and Social Affairs, ATAŞ)

B. INTERNATIONAL ORGANIZATIONS

UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE (UNECE)

• Ms. Fadiah ACHMADI (Economic Affairs Officer)

C. THE OIC SUBSIDIARY ORGANS

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

- Ms. Alia Sharify ORTAQ (Project Officer)
- Ms. Buhara ASLAN (Researcher, Economic and Social Research Department)



D. SPECIALIZED ORGANS OF THE OIC

ISLAMIC DEVELOPMENT BANK (IsDB)

- Mr. Cem Galip ÖZENEN (Senior Operations Officer)
- Mr. Oussema TRIGUI (Operations Team Leader)

E. COMCEC COORDINATION OFFICE (CCO)

- Mr. Selçuk KOÇ (Deputy Director General)
- Mr. Can AYGÜL (Head of Department)
- Mr. Mehmet Celalettin AKTAŞ (Head of Department)
- Mr. Nihat AKBALIK (Senior Expert)
- Ms. Betül ÖZAL (Assistant Expert)
- Mr. Kubilay KAVAK (Consultant)
- Mr. Volkan Recai ÇETİN (Consultant)
- Mr. Dr. İsmail Çağrı ÖZCAN (Consultant)
- Mrs. Rana AKBAŞ (Consultant)
- Ms. Sevgi Deniz AKDEMİR (Consultant)
- Mr. Hakan USLU (Coordinator)
- Mr. Selim UYAR (Registration and Accommodation Officer)