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

COMCEC

Proceedings of the 20th Meeting of the COMCEC Transport and Communications Working Group

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

COMCEC COORDINATION OFFICE
May 2023

Standing Committee
for Economic and Commercial Cooperation
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PROCEEDINGS OF THE 20TH MEETING OF THE
COMCEC TRANSPORT AND COMMUNICATIONS WORKING GROUP
ON

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

(May 3rd, 2023, Online)

COMCEC COORDINATION OFFICE
May 2023

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Introduction

The twentieth meeting of the COMCEC Transport and Communications Working Group was held virtually on May 3rd, 2023, with the theme of "Measuring the Environmental Impacts of Transport Infrastructures in OIC Member Countries".

The meeting was attended by the representatives of 20 Member States, namely; Azerbaijan, Bahrain, Benin, Gambia, Guinea, Indonesia, Iran, Kuwait, Mali, Morocco, Mozambique, Oman, Pakistan, Palestine, Saudi Arabia, Suriname, Togo, Tunisia, Türkiye, and Uganda. The meeting was also attended by the representatives of the United Nations Environment Programme (UNEP), Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC), Islamic Development Bank (IsDB), BESENVE Company, and COMCEC Coordination Office (CCO) [1].

During the meeting, the representatives of the Member States shared their experiences, achievements, and challenges regarding the environmental impacts of transport infrastructures in their respective countries. Furthermore, they have deliberated global practices concerning how to assess the environmental effects of transport infrastructures and profound success factors and challenges faced in the OIC Member Countries. The meeting has mainly considered the preliminary findings of the Guide titled "Measuring the Environmental Impacts of Transport Infrastructures in OIC Member Countries" which is currently being conducted by the CCO.

[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. Selçuk KOÇ, Director General of the COMCEC Coordination Office briefly introduced the COMCEC and its activities as well as underlined the importance of studying the theme of environmental impacts of transport infrastructures.

Mr. KOÇ emphasized that the existence of a functional transportation system is truly a prerequisite for economic growth as well as for all segments of society to enjoy the benefits of national economic development. In this respect, both direct and indirect impacts of transport infrastructure can be transformative in terms of the economic and social development of countries. Alongside its direct impact, the indirect impact of infrastructure arises through a variety of channels, including the enabling of productive private investment, the creation of new supply chains, or the reshaping of economic geography.

Mr. KOÇ underscored that it is an undeniable fact that along with its high contribution to economic growth and social welfare of countries, the rapid growth of the transportation sector may result in significant environmental impacts. In this respect, it is essential that national governments and industry should weigh the environmental consequences of transportation infrastructure at least as much as they weigh economic and social benefits. 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 expressed that the paradoxical relationship between economic and social benefits, and environmental impacts necessitates the formulation and implementation of transportation and environmental policies in a harmonious and coordinated manner. Such a joint policy approach would constitute significant leverage to minimize the negative effects of the transportation infrastructure on the environment.

Lastly, Mr. KOÇ underlined that measuring the environmental impacts of transportation infrastructures with an accurate method and model will play an essential role in establishing evidence-based policies to combat adverse environmental impacts. Effective measurement will also be beneficial in terms of shifting transportation investments to the least polluting and most efficient areas and designing sustainable transportation infrastructure. In this context, having an applicable guide that instructs how to best measure the environmental effects of transportation infrastructures and so describes both technical analysis and procedural processes step by step is of vital importance.

Afterward, Mr. Mustafa İMAMOĞLU, Head of Department, Ministery of Transport and Infrastructure of Türkiye chaired the meeting. Mr. İMAMOĞLU welcomed the participants and expressed her appreciation to the participants for their participation.

2. Conceptual and Methodological Framework of the Guide on Measuring the Environmental Impacts of Transport Infrastructures in OIC Member Countries

Mrs. Rana AKBAŞ who works as sustainability manager for ESCARUS presented the "Conceptual and Methodological Framework of the project" in which the scope is to develop "the Guide for Measuring the Environmental Impacts of Transport Infrastructures in OIC Member Countries".

In the beginning, general information about sustainability and climate change has been given to the participants. Afterward, the transportation sector's aspects in the frame of sustainability were described and the necessity of the project has been underlined. The presentation focused on the project objectives, outputs, components, and upcoming steps of the project.

Mrs. AKBAŞ presented the project team who were present in the meeting; Mr. Kubilay KAVAK as the leader of the project, Mr. İsmail Çağrı ÖZCAN as the senior sectoral expert, Mr. Volkan ÇETIN as the technical sectoral expert, Ms. Deniz AKDEMIR and Ms. İlke DUMAN as environmental experts, Ms. Esen Yaren YAVUZ as assistant specialist.

At the beginning of the presentation, it was mentioned that resource scarcity and climate change are the biggest problems of humanity. Earth continues to warm and cool on its cycle. However, the problem humans are facing today is that the warming of the world does not progress in the expected trend and it has been scientifically proven that this situation is caused by the activities of humanity. Over the last 171 years, human activities have increased CO2 concentrations in the atmosphere by 48% above pre-industrial (1850s) levels. This change is more than what has happened naturally in the last 20,000 years. As a result of rising consumption in parallel with the growth of the world economy and increasing welfare, there is a decrease in non-renewable resources and this situation leaves permanent traces on the environment and societies.

It was mentioned that extreme events are important because they often cause damage, both to nature and to people. The damage caused by extreme events can cost individuals, businesses, and governments a lot of money.

When worldwide carbon dioxide emissions distribution is examined, the transportation sector has a share of 20.2% coming right after the power and industrial combustion sectors. Considering the factors that cause emissions, different topics come to the fore in the sector. Transportation systems are associated with numerous environmental aspects at all geographic levels, from global to local. Mrs. AKBAŞ emphasized that this approach brings the objective of the project.

The nature of these environmental impacts is related to the modes of transport themselves, energy supply systems, emissions, and the infrastructure in which they operate. Vehicles consume large amounts of energy, especially oil, and also emit many pollutants such as carbon dioxide and nitrogen oxides, as well as noise and transportation infrastructure have also the potential to damage ecosystems and biodiversity.

On the one hand, critical environmental damages occur during the construction phase of transport infrastructures. Apart from the energy use and resulting emissions of the construction machines, the construction may require the removal of the forests and other green areas and

the relocation of the natural habitat. Similarly, especially the construction of motorways and railroads means the use of enormous land, which may otherwise be used for agriculture.

In addition to this, the operation of transport systems, which are energy intensive, creates continuous emissions of greenhouse gasses and noise.

These impacts result in an increasing trend in CO2 emissions released. Recently developed policies and approaches give huge importance to measuring and decreasing the impact of the transportation sector. As the countries of the world commit to the Net Zero Goal in line with the Paris Agreement, the demands of mobility and transportation systems are shifting towards efficient and low-emission modes of transport. Even with the predicted increase in transportation demand, the Net Zero Scenario calls for the transportation sector's emissions to decrease.

Mrs. AKBAŞ identified the relationship between the environment and transportation systems. Transportation activities support increasing mobility demands for passengers and freight, notably in urban areas. But transport activities have resulted in growing levels of motorization and congestion. As a result, the transportation sector is becoming increasingly linked to environmental problems. These problems depend on; the network, mode of transport, and traffic conditions.

The next concept that has been described in the presentation is “environmental impact assessment”. Some regulatory laws and actions are being implemented to deal with the environmental impacts of transport infrastructure and services all around the world. Especially in the line with European Green Deal, European countries aim to cut greenhouse gas emissions from transport by 90% by 2050. This aim will require significant investments in low-emission transport modes, such as electric vehicles, public transportation, and cycling. To map and categorize impacts a classical “environmental impact assessment” procedure may be useful.

Mrs. AKBAŞ stated that in this project, the need for an applicable Guide that instructs countries on how to best measure the environmental effects of transportation infrastructures will be satisfied.

It’s said that there are three key areas; 1) benchmark studies and comprehensive report, the purpose is to identify areas where OIC member countries are adopting best practices and areas where they may be falling behind; 2) guidebook document, the main output, with this document it is aimed to develop a guideline for measuring the environmental impacts of transport infrastructure in OIC member countries; 3) enhancement of the sustainability approach to promote sustainable transport infrastructure development in OIC member countries through evidence-based decision-making.

Project components were listed as Literature & Desktop Studies, Good Practice Examples from OIC Countries, Questionnaire Implementation & Reporting, and Preparation of a Step-by-Step Guide.

The case study countries have been selected in a way that they are successful at measuring the environmental impacts of transport infrastructures. Their respective guides, roadmaps, or handbooks prepared for the measurement of the environmental impact of transport

infrastructures will be analyzed. Also, the similarities and differences among the case studies will be compared. From OIC Asia, Malaysia has been proposed as the case study. From the OIC Arab group, Jordan has been proposed as the case study. Non-OIC case study countries have been selected as The United States, The United Kingdom, and Singapore.

3. Selected Case Country Presentation

Dr. İsmail Çağrı ÖZCAN presented "The United States Case Study". The outline of the presentation covered topics such as A Quick Look at the Transport-Environment Linkage in the US; The Government Agencies Involved; The Major Guidelines, Handbooks, Programs, and Methodologies; The Current Efforts to Deal with The Environmental Effects.

In the first part of the presentation, energy consumption in the US was discussed by sector and the energy needs of the transportation sector were emphasized. Based on this, the connection of greenhouse gas emissions was explained. Then, a table of the relevant governmental organizations in the United States was explained to the participants.

Dr. ÖZCAN stated that there are many methods applied in the United States to measure emissions in the transportation sector; 41 transportation GHG analysis tools exist.

Afterward, the Congestion Mitigation and Air Quality Improvement (CMAQ) Program has been described as a state grant program to fund transportation projects and programs that help meet the requirements of the Clean Air Act (CAA). CMAQ program can fund a wide range of projects ranging from shared micro-mobility projects, electric cars, and charging stations to diesel engine replacements and retrofits, transit enhancements, and bicycle and pedestrian facilities. Dr. ÖZCAN showed the steps in calculations of emission reductions of the “Bicycle and Pedestrian Improvements Program” “Diesel Idle Reduction Technologies Program” and “Carpooling and Vanpooling Program”. CMAQ Emissions Calculator Kit is used for the example calculations.

It is also mentioned that The Department of Transportation published the Benefit-Cost Analysis Guidance for Discretionary Grant Programs in January 2023 aiming to draw the general principles and dimensions of a benefit-cost analysis report to be submitted to the Department's discretionary programs. It defines and specifies the use of the discount rate and the associated benefits and costs incorporated in a benefit-cost analysis. With respect to the discounting, the document has made a distinction between the discounting of the benefits/costs associated with greenhouse gases and those associated with other air pollutants. While it is suggested to use a discount rate of 7% for the air pollutants such as sulfur oxides (SOX), nitrogen oxides (NOX), and fine particulate matter (PM2.5), a 3% discount rate is recommended for the costs and benefits regarding CO2 emissions due to their longer period and even across generations impacts.

Dr. ÖZCAN emphasized that new transport infrastructures can reduce emissions in various ways. First, it can reduce travel distances meaning that with the same amount of traffic and vehicle type, the total emissions are lowered. Second, it can shift both the passengers and freight to more efficient modes of transportation. Last, it can initiate an operational improvement or investments in technologies targeting that reduce fuel usage reduction.

In the last part of the presentation, Dr. ÖZCAN talked about current efforts to deal with the environmental effects in US transportation infrastructures. Hybrid and Electric Cars are the two main options to deal with GHG emissions. US Environmental Protection Agency is currently working on new regulations and applicable standards. Fuel Standards and New Vehicle Technologies are improving while the mechanical industry continuously evolving.

4. Presentations of the Member States

a. Türkiye

Ms. Canan Esin KÖKSAL, 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. She stated that HEY Portal 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 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 e-scooter and the establishment of Low Emission Zone is still ongoing.

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 60.000 m^2 noise barrier are planned to be constructed/structured to have "Greener Cities" in Türkiye.

Afterward, Mr. Erdoğan DEDEOĞLU, Deputy Director, Ministry of Transport and Infrastructure of Türkiye, presented the environmental impacts of the 1915 Çanakkale Bridge and Motorway, which was tendered with the Build-Operate-Transfer model. At the outset of the presentation, Mr. DEDEOĞLU went over some information about the tender and contract of this important project. He said that before the Project, a ferry ride was the only option to cross the Canakkale Strait and the duration of this travel varies between 1.5 hours to 5 hours, especially during the summer season and national holidays. After the completion of the 1915 Canakkale Bridge, this travel duration decreased to only 6 minutes.

Concerning the importance of assessing environmental impacts, Mr. DEDEOĞLU mentioned that

Türkiye is committed to Sustainable Development Goals (SDGs). Therefore, assessment of the environmental impacts of the 1915 Çanakkale Bridge and Motorway Project is imperative. To this end, six main Environmental and Social (E&S) Documents have been prepared for the

Project which covers all environmental and social requirements and commitments. These are basically;

- ESIA Report (Environmental and Social Impact Assessment Report)
- SEP (Stakeholder Engagement Plan)
- EPD (Employment Policy Document)
- ESMP (Environmental and Social Management Plan)
- ESAP (Environmental and Social Action Plan)
- LACRP (Land Acquisition, Compensation, and Resettlement Plan)

He said that ESAP is the key document that is being prepared in accordance with international standards and contains all environmental and social requirements of the Project. Then he listed the studies conducted to assess the impacts as followings;

- Air Quality Measurements and Modelling Studies
- Noise Measurements and Modelling Studies
- Water Quality Analyses
- Biodiversity Field Studies
- Bird Observation Studies
- Assessment of Greenhouse Gas Emissions
- Socio-economic Field Studies, Interviews
- Identification of Community Needs (CLAP - Community Level Assistance Programme)
- Identification of Cultural Heritage Assets (Field observations, archaeo-geophysical studies)

Mr. DEDEOĞLU continued his presentation with the identified environmental impacts and mitigation measures implemented related to the Project. He said that the first direct impact occurred on the biodiversity components of the Project. Ecologists monitored mammal passages in Canakkale Strait and work stopped when mammals were observed within the exclusion zone. In addition, in collaboration with Canakkale 18 March University 1045 individuals subject to negative impact from dredging and reclamation works were transplanted to a suitable habitat. A 95% success rate was observed after two years of transplantation. He also said that the ecological bridge is being monitored by camera traps 7/24 to evaluate its efficiency and seeds of limited range distribution flora were collected and delivered to GeneBank for conservation.

Furthermore, Mr. DEDEOĞLU underlined that in the construction phase, surface and groundwater quality measurements were performed. He said that the Project was divided into sections according to the drainage channel catchment basins and spillage risk from Dangerous Goods Vehicles (DGVs) assessed for each section. In the construction phase, Project's air quality impact was limited by dust. Quarterly measurements were performed on determined locations. In the operation phase, no significant direct impacts on air quality. Greenhouse gas (GHG) emissions are calculated and reported annually. Periodic noise measurements have been

performed at sensitive receptors. A noise Modeling Study was performed to anticipate operation phase noise level increase at the nearest settlements due to traffic. As a result, a 900-m length and 3-m height noise barrier was installed. He also said that to minimize the impacts on soil quality and geology, several measures were developed during the ESIA stage, and implemented on-site by the earthworks team with the support of an ecologist.

Mr. DEDEOĞLU emphasized that to support the Project area, a Community Level Assistance Programme was developed and implemented. To increase the income and improve the welfare of the affected settlements, 321 Projects for 32 settlements have been determined and implemented as of July 2022. Solar panels are used at nine locations to supply energy for cameras, VMSs, flashers, meteorological stations, etc. Project's energy and material consumption rates are being monitored, and annual targets are set to ensure reduced consumption.

Mr. DEDEOĞLU enlisted the positive impacts of the Project on economic development and urbanization as followings;

- Reducing the loss of life and property caused by traffic accidents
- Connecting Istanbul to Çanakkale and then to the North Aegean Region
- Providing transport integration in the Marmara and Aegean Regions as a motorway
- A significant contribution to the development of industry and tourism
- Shorter journey distances and an increase in the average speed, providing a comfortable ride
- Eliminating the economic losses caused by the increase in vehicle operating expenses
- Minimizing environmental factors such as traffic congestion, emission increases, and noise pollution

After briefing the lessons learned during the Projets implementation, Mr. DEDEOĞLU highlighted the fact that the EIA and ESIA works were initiated in the project planning phase, therefore, all risks were identified at a very early stage and so the necessary measures were taken at the time. To manage all identified risks, a multidisciplinary team of experts was formed which included around 160 experts.

In conclusion, Mr. DEDEOĞLU outscored the main outcomes of his presentation as follows:

Importance of Robust EIA and ESIA

- Ensures sustainable development by balancing economic growth, social development, and environmental protection

Reflection on the 1915 Çanakkale Bridge and Motorway Project

- Successful application of EIA and ESIA methodologies
- Effective mitigation and management measures to address environmental impacts
- Strong monitoring plans to identify any slips, and resolution with strong ESMS

Lessons Learned and Best Practices

- Early integration of EIA and ESIA in project planning
- Stakeholder engagement and public consultation
- Adaptive management and collaboration with regulatory authorities

Implications for Future Transport Infrastructure Projects

- Enhancing the environmental performance of projects through continuous improvement
- Informed decision-making to minimize negative impacts and promote sustainable transportation

5. International Organizations and Private Sector's Perspective

a. UNEP-WCMC: "A Global Picture of Environmental Risks of Planned Transport Infrastructure"

Mr. Andy ARNELL, Senior GIS Officer, at the UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC), made a presentation with the theme "A Global Picture of Environmental Risks of Planned Transport Infrastructure".

At the beginning of his presentation, Mr. ARNELL highlighted the fact that weighing ecological consequences against socioeconomic benefits is essential for decision-making. Then, he briefly introduced the joint partnership project on sustainable transport infrastructures initiated by the UNEP-WCMC team. He said that for this project the team developed a new global database, created a suite of relevant metrics, estimated environmental risks, and compared risks to benefits to the economy. Concerning the development of a new global database on sustainable transport infrastructure, the project team compiled infrastructure plans from many different sources into one database. This includes planned and in-progress projects (as some of these are carried out in stages over many years). While underlining the uniqueness of this database, he showed the audience the maps including the categorization of the countries according to their state related to the risk to biodiversity and risk to ecosystem services per km of project.

Mr. ARNELL continued his presentation by providing a few headline statistics on environmental risks. He stated that about 60,000km of planned infrastructure development is planned in either protected areas or key biodiversity areas (conservation areas). More concerning is that 8,000km (1.6%) of planned infrastructure cuts into areas that are currently wilderness. These are large areas where there's negligible human footprint currently. In addition, there are various other secondary risks associated with wilderness areas including exposure to new zoonotic diseases. In terms of ecosystem services, and focusing on carbon, there are approximately 883 million tonnes at risk - for context, this is more than Costa Rican forest's aboveground biomass in 2000 (776 million tonnes). Then he demonstrated the relationship between composite environmental risk and economic benefit.

Furthermore, Mr. ARNELL introduced the Global Infrastructure Impact Viewer platform. He mentioned that this platform is a tool for visualizing the first global database of planned road and railway infrastructure, and the risks and benefits it may pose to people and the natural world. Mr. ARNELL completed his presentation with some policy suggestions on how to develop integrated approaches to sustainable infrastructure.

b. BESENVE: "Measuring the Environmental Impacts of Transport Infrastructures: Private Sector Perspective"

Dr. Cem KARABAL, General Manager, BESENVE Company based in Istanbul, delivered a presentation with the theme "Measuring the Environmental Impacts of Transport Infrastructures: Private Sector Perspective ".

At the beginning of his presentation, Dr. KARABAL shed light on the activities conducted by BESENVE to increase energy efficiency in general and contribute to decarbonization in special. Dr. KARABAL continued to mention the macro-environmental effects of the transport infrastructure such as greenhouse gases, air pollution, global warming, public health, and Labor and performance loss. Then he touched upon the interdependent interaction between these effects.

Concerning the measuring of environmental effects, Dr. KARABAL states that increased awareness of global warming has led to the need for corporations to calculate and report greenhouse gas emissions. In many countries, there are carbon emission limits and mandatory reduction targets. He continued his presentation by introducing the QuickCarbon electronic-based platform which is used to calculate and estimate the amount of carbon emissions. He said that QuickCarbon integrates into existing business units with a very user-friendly and easy-to-use structure. It can easily calculate the canon emissions, analyze emission sources and report them in accordance with international standards.

Dr. KARABAL completed his presentation by saying that QuickCarbon enables development strategies to reduce corporate carbon footprint with scenario analysis. Thanks to its multi-functional dashboards, it makes progress instantly visible, thus helping to make proactive decisions and evaluate results.

6. Utilizing the COMCEC Project Funding (CPF)

Mr. Muhammed Ziya SARI, Assistant Expert 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. SARI mentioned that the implementation phase started in 2021. This program has been designed by considering the effects of the COVID pandemic. This is the second and final implementation year of this program.

Regarding the COMCEC Al-Quds Program, Mr. SARI 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 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 this year, 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 5 years. Also, 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.

7. Closing Remarks

The Meeting ended with closing remarks of Mr. Can AYGÜL, Director at the COMCEC Coordination Office. He thanked all the representatives for their attendance and precious contributions.

Mr. AYGÜL emphasized that seamless and uninterrupted transportation has been one of the major sources of concern for the economic and social development of countries. Therefore, the impact of transport infrastructure is immense for the development efforts of countries. However, the adverse environmental impacts of transport infrastructure should not be underestimated and ignored at the expense of its economic and social benefits. Appropriately measuring the environmental effects of transport infrastructure is a critical issue to determine the magnitude of impact and formulate the best policies to achieve a sustainable balance between economic and social benefits and environmental impacts of transport infrastructure.

Moreover, he underlined that being able to appropriately measure the environmental effects of transport infrastructure is important not only for categorizing and prioritizing the investment resources of countries in the short term but also to have a comprehensive and integrated long-term planning perspective on transportation investments.

Finally, Mr. AYGÜL encouraged the member countries to share their views, comments, and also critiques, if any, about the research report by e-mail to the Secretariat. To the extent possible, these views and comments will be incorporated into the report. He expressed his thanks to the member country delegations, for their active participation and the representatives of OIC Institutions for their attendance and valuable contributions.

Mr. Mustafa İMAMOĞLU, the Chairman of the Meeting, also thanked all the participants for their participatory attitudes and contributions.

Annex 1: Agenda of the Meeting

COMCEC

20TH MEETING OF THE COMCEC TRANSPORT AND COMMUNICATIONS WORKING GROUP

(May 3rd, 2023, Virtual Meeting)

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

(1st Session- Discussion and Review of Preliminary Draft Guide)

Opening Remarks

1. The Conceptual and Methodological Framework of the Guide
2. Global Trends in Measuring Environmental Impacts of Transport Infrastructures
3. Overview of the Practices in the OIC Member Countries
4. Member States' Experiences in Measuring the Environmental Impacts of Transport Infrastructures
5. Private Sector/International Organizations' Perspective on the Subject
6. COMCEC Financial Support Instruments

Closing Remarks

Annex 2: Program of the Meeting

COMCEC

20TH MEETING OF THE COMCEC TRANSPORT AND COMMUNICATIONS WORKING GROUP
(May 3rd, 2023, Virtual Meeting)*

"Measuring the Environmental Impacts of Transport Infrastructures in OIC Member Countries"
(1st Session)

13.15-13.30 **Joining the Online Meeting**
*(The link will be shared prior to the Meeting)

13.35-13.40 **Opening**

13.40.-14.00 **Conceptual and Methodological Framework of the Guide on Measuring the Environmental Impacts of Transport Infrastructures in OIC Member Countries**

- *Presentation: Ms. Rana AKBAŞ*
  Consultant
  ESCARUS

14.00-14.10 - Discussion

14.10-14.30 **Selected Case Country Presentation**

- *Presentation: Dr. İ. Çağrı ÖZCAN*
  Consultant
  ESCARUS

14.30-14.40 - Discussion

14.40-15.10 **Member States' Experiences in Environmental Impacts of Transport Infrastructures**

15.10-15.35 **International Organizations' and NGOs' Perspective on the Subject**

A Global Picture of Environmental Risks of Planned Transport Infrastructure

Presentation: *Mr. Andy ARNELL*
Senior GIS Officer
UNEP-WCMC

Measuring the Environmental Impacts of Transport Infrastructures: Private Sector Perspective

Presentation: *Dr. Cem KARABAL*
General Manager
BESENVE

15.35-15.45 COMCEC Project Support Programs

15.45-15.50 Closing

Annex 3: List of Participants

LIST OF PARTICIPANTS

20th Meeting of Transport and Communication Working Group (May 3rd, 2023)

A. MEMBER COUNTRIES OF THE OIC

REPUBLIC OF AZERBAIJAN

- Ms. AYTAN TURABOVA

Leading adviser, Ministry of Digital Development and Transport

KINGDOM OF BAHRAIN

- Mr. MUBARAK ALROMAİHİ

Second secretary, Embassy of the Kingdom of Bahrain in the Republic of Türkiye

REPUBLIC OF BENIN

- Mr. ZİNSOU BİENVENU

Head of Planning and Studies Service, Land Transport Department

REPUBLIC OF GAMBIA

- Mr. SULAYMAN GAYE

Principal Planner, Ministry of Transport, Works and Infrastructure

REPUBLIC OF GUINEA

- Ms. DIAWARA MADINA

Head of Division at the Office of Strategy and Development, MINISTRY OF TRANSPORT

REPUBLIC OF INDONESIA

- Mr. KADEK WİDWAN DWİPA PUTRA

Official of Multilateral Relation Division, Ministry of Transportation

ISLAMIC REPUBLIC OF IRAN

- Ms. MAHSA KALANTARİ

Transportation expert, Ministry of Roads and Urban Development of Islamic Republic of IRAN

THE STATE OF KUWAIT

- Mr. ABDULHADİ ALMERRİ

Director of Land Transport, PART

REPUBLIC OF MALI

- Mr. ABDOUL KADER KY

National Director of the Digital Economy, National Directorate of the Digital Economy - DNEN / Ministry of Communication, Digital Economy and Modernization of the Administration – MCENMA

KINGDOM OF MOROCCO

- Mr. SALMA ACHBAR

Head of the multimodality and transport coordination service, Ministry of Transport and Logistic

- Mr. SALMİ ZOBAİR

Head of sustainable development, Ministry of Transport and Logistics

- Mr. SOUAD ELOMRI

Responsible for cooperation, Ministry of Equipment and Water

REPUBLIC OF MOZAMBIQUE

- Mr. CHİNGUANE SEBASTİAO MARCOS MABOTE

Head Master, INATRO,IP

- Mr. FRANCİSCO CABO

International Relations Manager, Mozambique Civil Aviation Authority

- Mr. SERGİO NİQUİSSE

GIS Specialist, Agencies National of Geospatial Development, IP

SULTANATE OF OMAN

- Dr. SAİF SAİD ALSİNANİ

Director General of Planning, Ministry of Transport, Communications and Information Technology

- Mr. ABDULLAH ALBUSAIDI

Consultant of Net-Zero, Ministry of Transportation, Communication and Information Technology

ISLAMIC REPUBLIC OF PAKISTAN

- Mr. KHIZER JAVED

Deputy Chief, National Transport Research Centre, Ministry Of Communications, Islamabad

- Mr. SHAHBAZ LATIF MIRZA

Director Road Transport, Ministry of Communications, Islamabad

THE STATE OF PALESTINE

- Mr. MAHER ALAHMAD

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