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# Strengthening the Transport Operating Structure and ERAs in IPA II (2014-2020) Period EuropeAid/139809/IH/SER/TR

Contract N$^0$ TR14SR50

# Mid-term Evaluation Report

## Final Version

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ICE

SECTORAL OPERATIONAL PROGRAMME FOR TRANSPORT

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# Abbreviations

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| DGRTS | Directorate General for Regulation of Transport Services |
| EEAP | Environmental Effects Assessment Panel |
| EGM | The Turkish National Police |
| ERA | End-Recipient of Assistance |
| EU | European Union |
| EUD | European Union Delegation |
| EUID | European Union Investments Department |
| GHG | Greenhouse Gas |
| IFI | International Financial Institution |
| IPA | Instruments of Pre-accession Assistance |
| ISP | Indicative Strategy Paper |
| ITS | Intelligent Transport system |
| KGM | Directorate General of Highways |
| M&E | Monitoring and Evaluation |
| MAAP-T | Multi-Annual Action Programme for Turkey on Transport |
| MoEU | Ministry of Environment and Urbanisation |
| MoTI | Ministry of Transport and Infrastructure |
| NCCAP | National Climate Change Action Plan |
| NGO | Non-Governmental Organisation |
| OIS | Operation Identification Sheet |
| OS | Operating Structure |
| R&D | Research and Development |
| SOPT | Sectoral Operational Programme for Transport |
| SUMP | Sustainable Urban Mobility Plan |
| TA | Technical Assistance |
| TCDD | Turkish State Railways |
| TEN-T | Trans-European Transport Network |
| ToR | Terms of References |

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# 1. Executive Summary

The Midterm Evaluation has the objective of providing an overall independent assessment of the MAAP-T achievements under the criteria of *relevance*, *efficiency*, *effectiveness*, coherence, *EU value-added*, *sustainability* and *coordination* in relation to the work carried out so far from 2014 up to date. This Midterm Evaluation makes suggestions on reconstructing the intervention logic in a way that would serve the achievement of expected outcomes with a view to facilitating implementation and mitigating risks of de-commitment of funds.

The Midterm Evaluation progressed through desk analysis of documents, analysis of the implementation progress, data collection for quantitative indicators and related comparison with the current and target values, semi-structured interviews with the relevant EUID Units and other institutions (EUD and the World Bank inter alia).

MAAP-T is highly relevant with the problems of the Turkish transport sector. These problems include severe modal imbalance towards road transport, low shares of rail and maritime transport, poor inter-modality, lack of a climate related transport strategy, high fatality rates in roads, lack of sufficient research in the sector, inadequate implementation of ITS systems, problems regarding accessible and sustainable transport at urban level and need for further alignment with the EU acquis. MAAP-T is also well aligned with the Turkish transport policies, such as the enhancement of the share of rail and maritime transport, the reduction of fatalities with the improvement of transport safety, the establishment of a Transport Research and Training Centre as well as the establishment of new corridors with the neighbouring countries. The MAAP-T is still under implementation and, as such, a large majority of actions have not yet achieved their full operational objectives.

Under **Action 1** ***Sustainable and safe transport*** (more precisely under Activity 1.1 *Improving and Modernizing Railway Infrastructure*) the Construction of Halkalı-Kapıkule Railway Line project is likely to contribute to the achievement of strengthening TEN-T rail network connections to the EU. Turkish authorities showed high ownership of this infrastructure investment. The railway will reduce the travelling time in passenger and cargo transport along the corridor and will contribute positively to further enhance modal shift towards rail transport. Capacity building of the Directorate General of Highways (KGM) for the road infrastructure safety management will help enhancement of road safety and contribute to the improved safety in transport. The project Strengthening intermodal transport services in Turkish railway sector is expected to support the shift of transport modality to railways by the construction of intermodal terminals and junction lines; more precisely, the Construction of the Çerkezköy intermodal terminal (currently under revision) will add to modal shift when completed.

Under **Action 2** ***Efficient transport*** the C-ITS Project for Turkey (TURKAUS) (currently under revision) is likely to support implementation of the Intelligent Transport Systems (ITS) strategy and the spread of ITS in the transport sector, through supporting connected national investments. The project Enhancement of institutional and administrative capacity of Directorate of Transport, Maritime Affairs and Communications Research Centre (approved) will reinforce research and development in transport sector by providing necessary institution building to the Centre.

There are certain doubts in relation to the actual achievement of the results envisaged under **Action 3** ***Accessible and inclusive transport*** as all projects except one are still under revision and two projects have been rejected. Although, some of the ERAs are expected to be supported by technical assistance (provided both by the Ministry of Transport and the World Bank) for the preparation of Sustainable Urban Mobility Plans (SUMPs), the original target to achieve 6 SUMP in place seems rather ambitious.

Under **Action 4** ***Acquis Alignment and EU Integration*** technical assistance and relevant studies will strengthen Turkey-EU policy dialogue in the field of transport. The degree of implementation of MAAP-T can be shown mainly by the actual disbursement of the allocated financial resources, which is currently 34,5% of the total, indicating that there is large room for progress in the implementation.

The technical assistance envisaged under **Action 5** is also expected to provide momentum to this process and also support the preparation of a project pipeline for future IPA III funding, where selections of projects depend on their relevance and maturity.

Negative external effects, risk assessment and management capacities are critical for achievement of the results during the preparation and implementation of the activities. One of the main impediments for achieving the results is that the technical capacities on planning and project preparation of the ERAs (such as Municipalities) are insufficient. In general terms, as the low maturity level of the projects raise the risks related to implementation, delays should regularly be taken into account (when it comes to infrastructure projects risks relate to difficulties in receiving permits, expropriation processes, unsuitable environmental and social impact studies). Additionally, Covid-19 pandemic brought some challenges to implementation and it is likely to amplify the negative effects in the implementation of immature projects due to serious staff/worker shortage, difficulties in recruitment and idling machinery and equipment.

However, the choice made by the OS to concentrate approximately 71 % of allocated funds on the Construction of Halkalı-Kapıkule Railway Line project significantly favoured the absorption of funds. On the other hand, 64% of the projects in the pipeline are either under revision, under preparation or withdrawn which signal a shortcoming in the maturity of the projects. The problem is even more critical within Action 3 *Accessible and Inclusive Transport* since there are only two projects approved out of the total pipeline raising questions on the quality of the project documents and underlining the need of the ERAs (Municipalities) for more technical assistance and capacity building in project preparation. There is good communication and cooperation between EUID and ERA. On the other hand, while the preparation of projects is basically the responsibility of the Municipalities, more interaction between EUID and the ERAs is needed regarding the preparation of project documents. It has been noted that Covid 19 has seriously affected the procurement stage since participation in evaluation meetings proved difficult.

Among the EUID personnel 65% have been working for more than 6 years indicating a high level of sustainability within human resources which is positive from the human resources point of view.

As far as the coherence in the design of the MAAP-T is concerned there are relevant interactions between, within and across the various Actions, mutually reinforcing each other.

EU transport policies are also embedded in the design of the MAAP-T and it goes in parallel with the future EU transport policies and the Green Deal, such as the reduction in GHG emissions sourcing from transport with climate related activities, more shift of freight from road to rail transport, completion of the

high speed rail network, completion of TEN-T network, progress towards zero road-transport fatalities, automated and connected multimodal mobility, measures taken to make transport less polluting in cities with SUMP projects, etc.

There are still areas which would need EU support particularly in the establishment of logistic centres (which is among the targets of the Turkish transport policy) as the establishment of these centres require both infrastructure investments and capacity building. Remaining rail networks for TEN-T connections still need EU support. Nevertheless, these connections require a very high level of investment where Turkey should also seek IFIs loans. Reducing road transport fatalities, shifting modality to rail transport are among the other areas that need EU support: in this regard, the setting-up of a project pipeline on these areas has to be prepared for IPA III funding.

Sustainability concerns are also embedded in the MAAP-T design. Activity 1.2 *Environmental and climate change-related measures* supports the identification, preparation and implementation of climate change-related mitigation and adaptation policies in the transport sector. No project under this Activity has been submitted. Not preparing a project under this activity has serious implications (such as decarbonisation taxes on movement of goods carried by transportation practices that harm the environment, as well as limitations to transport that from Turkey to the EU that are which are harmful to the environment. Partial agreement signed on the Green Deal in EU underlines the importance of the Green Deal and lack of a climate change related transport strategy would not allow Turkey to develop policies in parallel with the Green Deal. MAAP-T also contributes to environmental sustainability by sustainable urban transport and encourages preparation of SUMP plans at urban level.

Coordination is noted to be sufficient among the units of EUID. On the other hand, lack of cooperation with the main stakeholders with regards to the Activity 1.2 indicates that there is still room to improve cooperation with other OS. Activity 1.2 has different dimensions such as transportation and environment. Under this framework there is a wide room for cooperation between MoTI and Ministry of Environment and Urbanization (MoEU). Within such cooperation both institutions can contribute to project development under Activity 2 with their own expertise on transport policies and environmental policies. Under Action 3 *Accessible and Inclusive Transport*, more intense cooperation with ERAs in improving project preparation would trigger the necessary impulse.

Inadequacies within institutional capacities of ERAs require the original MAAP-T intervention logic to be somehow reconstructed. While Activity 1.2 *Environmental and climate change related measures* has received no project proposals, this activity has to be maintained for the factors explained above. A project can be prepared to enhance and stimulate the necessary cooperation between MoTI and MoEU for the implementation of this specific Activity. However, with the limited time remaining and cumbersome cooperation processes, it is strongly recommended to support this inter-ministerial cooperation through a technical assistance contract implemented by the EU Delegation under a Framework Contract outside the scope of the MAAP-T where the awarded contractor would coordinate these Ministries in the work for preparation of a project under Activity 1.2. Under Action 3 *Accessible and inclusive transport* the target originally set to the preparation of 6 SUMP is too ambitious and should be reduced. Due to the rejection of proposed projects, the unspent allocation to this Action can be shifted to implement Activity 1.2.

# 2. Analysis of the subject of the Evaluation framework

The strategic objectives of the MAAP-T can be summarised as follows:

- to enhance the sustainability and safety of the national transport system;
- improve the efficiency of the transport system;
- promote a shift from individual to sustainable, accessible and inclusive modes of public transport at both national and urban levels;
- to strengthen Turkey's integration to the EU in the field of transport, through a progressive alignment of the Turkish Transport sector with the EU Transport acquis;
- to support Ministry of Transport and Infrastructures in managing the MAAP-T in order to ensure that EU, national and donor development funding in Turkey's transport sector are used to best effect

In line with the above listed objectives, the expected results of the MAAP-T Programme are:

**R1)** a shift towards a safer, environmentally friendly transport system reflecting a more balanced modal split;

**R2)** the spread of smart, innovative, resource, time- and cost-efficient solutions across all transport modes;

**R3)** improved accessibility for all of transport services, increased capacity and effectiveness of urban public transport; reduced congestions and emissions created by transport in urban areas;

**R4)** improved legislative, institutional and administrative capacities needed to assume the obligations of membership under acquis chapters 14 and 21; policy dialogue with the EU in the field of Transport strengthened;

**R5)** MAAP-T is implemented in an effective, efficient, regular, transparent and timely manner.

The MAAP-T's thematic framework, its priorities and objectives have been designed with a seven-year outlook, reaching until the end of the EU's current financial perspective 2014-2020. After the 2018 amendment IPA allocation for implementation of MAAP-T was reduced from €442,800,000 to €347,900,000 and €2.500.000 was injected to this amount via Action 3. With the national co-financing the total amount placed at the disposal to MAAP-T is €409,294,117.

The distribution of the budget according to Actions to be implemented is shown in the following table:

*Table 1: Distribution of Programme Budget*

| # | MAAP Transport Action | With Entrusted Entity (€) | With IPA 2 beneficiary (€) | Total (€) | Share (%) |
|---|---|---|---|---|---|
| *1* | Sustainable and Safe Transport | 450,000 | 295,750,000 | 296,200,000 | 85 |
| *2* | Efficient Transport | 450,000 | 5,400,000 | 5,850,000 | 2 |

| | | | | | |
|---|---|---|---|---|---|
| *3* | Accessible and Inclusive Transport | 900,000 | 24,450,000 | 22,850,000 | 7 |
| *4* | Acquis Alignment and EU Integration | | 15,000,000 | 15,000,000 | 4 |
| *5* | Technical Assistance | | 8,000,000 | 8,000,000 | 2 |
| | **TOTAL** | **1,800,000** | **348,600,000** | **350,400,000** | **100** |

The Midterm Evaluation has the objective of providing an overall independent assessment of the MAAP-T achievements to date under the criteria relevance, efficiency, effectiveness, coherence, EU value-added, sustainability and coordination.

The Midterm Evaluation includes an assessment of the work carried out so far from 2014 up to date and provides an assessment of the critical issues still to face in finalising MAAP-T implementation, such as from today up to 2025. In this framework the Midterm Evaluation makes suggestions on reconstructing the intervention logic in a way that would similarly serve the achievement of expected outcomes with a view to facilitating implementation and mitigating risks of de-commitment of funds. Furthermore, the Midterm Evaluation tries to identify useful lessons learned and recommends to make some preliminary efforts in view of the incoming programming IPA III, from 2021 onwards.

Under the ***relevance*** criterion the capacity of the MAAP-T to address the actual needs and the priorities of the target groups in the transport sector is examined. In this respect the Evaluation tries to judge the alignment of the MAAP-t with the Turkish transport policies. To this aim, the Report analyses the strengths and weaknesses of the transport sector and its perspectives on alignment with EU transport policy. Relevance analysis also compared the MAAP-T with the Turkish transport policy including its future strategies and action plans.

Under ***effectiveness*** the content of the envisaged Activities were compared with the expected results of the respective Actions. It was analysed how far and how much the expected outputs are leading to the achievement of the results and the objectives of MAAP-T. Furthermore, external factors and risks that could be impediments in achieving the objectives were mentioned in detail.

Under ***efficiency*** it was questioned whether the way the funds have been spent was efficient and if there could be other ways of spending the funds. In this context, the spending was questioned both from the point of view of absorption as well as regarding the distribution of the funds to different projects. The efficiency in completing the procedures required by the projects in the pipeline was also examined. It was analysed whether the concentration of resources adopted in the design was actually conducive to the achievement of the expected results. In essence, the Midterm Evaluation assessed the performance and efficiency in managing the funds, checked whether the activities completed so far delivered value for money and whether the outputs could be delivered with better use of funds or more could be realised for the same amount of funds.

***Coherence*** was another criterion to assess the context of MAAP-T. The analysis was conducted both with a vertical approach (within the Actions' results chain) and with a horizontal approach (across the Actions) questioning possible connections between different Activities under different Actions. Under each Action, those Activities which were mutually supportive of each other were highlighted. Likewise, mutually supportive Activities under different Actions were analysed underlining how these activities

reinforced each other. Furthermore, it was questioned whether parts of MAAP-T where wider EU transport policies are embedded, were actually responding to the EU objectives and particularly under the Green Deal.

Under ***EU Value Added*** criterion, it was analysed to what extent the issues addressed by the MAAP-T continued to require EU support. In this context the future investment needs of the Turkish transport sector were questioned. Possible EU support to these activities it should be envisaged with a view to preparation for IPA III funding which is expected to target relevant and mature projects and funds would not be distributed according to predetermined budgets for predefined sectors as it is in the case of IPA II.

Under ***Sustainability*** criterion, since transport emissions had a wide share in environmental pollution, the environmental consequences of the MAAP-T Actions and Activities were analysed. In this context, the possible reduction of the weight of road transport generating high dependence on resources of fossil fuels was assessed. Actions on growing transport of dangerous goods as a continuous source of pollution hazard were put into question.

***Coordination*** among institutions was analysed in different axis. Coordination among the Units of EUID, coordination between EUID and other relevant Directorates in MoTI, cooperation between EUID and other affiliated institutions such as TCDD, cooperation between EUID and other OS, etc. All these levels of coordination were analysed taking into stock their impact on project preparation and implementation.

# 3. Methodology

The key methodology steps followed in the Evaluation can be summarised as follows:

- Desk review of all MAAP-T related documents, and all policy documents
- Examination of ongoing Actions and Actions whose implementation has not been started yet
- Data Collection on the relevant quantitative indicators regarding ongoing Actions
- Semi-structured interviews with the relevant EUID Units, other relevant MoTI Departments and relevant institutions subordinated to the MoTI
- Analysis of the findings from the collected data and the completed interviews.

The preparation for the Midterm Evaluation Report started with a detailed desk analysis of the main documents related to the MAAP-T.[1] These documents clarified the content of MAAP-T and its Actions, reflected the relevance of the Programme under the alignment of Turkish transport to EU transport policies and facilitated the identification of the current status of MAAP-T in terms of activities and projects.

With a view to understand the current status of the Actions in terms of maturity of the projects, a list of projects under revision, approved and contracted were received from MoTI. The current status of the Actions in which projects have not been contracted yet was clarified with the support of EUID.

Semi-structured interviews were conducted with EUID Units, EUD and the Word Bank. The EUID institutions interviewed included:

- Programming and M&E Unit
- Procurement Unit
- Contract Management Unit
- Financial Management Unit
- Technical Assistance and Human Resources Unit
- Quality Assurance and Control Unit

An interview was conducted with the EUID Head of Department to gain an overall understanding of the needs of the sector in general, in the specific case of MAAP-T as well as the perspectives of alignment to EU transport policy. Interviews with the units of EUID intended to collect information on micro issues and the cycle starting from the programming stage to the end of implementation of the projects. Interview with the Programming and M&E Unit provided information on the programming process and monitoring missions. The Procurement Unit provided information on the procurement stage and the challenges regarding procurement, the Contracting Unit reflected their cooperation with the other EUID units, how the implementation was managed following contracting of projects and various challenges faced during contracting and implementation. The Financial Management Unit provided information on the financial

[1] The detailed list of the documents is provided in Annex II

management regarding all contracted projects and their financial registration. The Quality Assurance Unit gave information on quality assurance regarding the implementation of the whole cycle.

Data was collected on the quantitative indicators. This data included the current situation and also the targets set for the quantitative indicators. While majority of the data was received from EUID, some of the data were collected from various action plans and strategy documents on transport.

The Evaluation answered the questions presented in the ToR on relevance, efficiency, effectiveness, coherence, EU value added and cooperation. Suggestions were made for reconstruction of the intervention logic. The reconstruction was based on these two following factors:

- Preparation of satisfactory project documents proved difficult for some of the ERAs due to lack of institutional capacity. Some of the project documents were rejected by EUD and some document still go through very lengthy revision periods which do not seem promising with respect to the timely commencement of contracts: accordingly, the relevant indicators need modification.
- Projects could not be prepared under some of the activities and the related indicators are not relevant anymore. These indicators also need to be deleted.

Also, the development of the Midterm Evaluation went through some difficulties. These difficulties can be summarised as follows:

- While the specific objectives and the indicative activities were shared with the Evaluator many OIS documents are still under revision and are therefore confidential. Accordingly, it is difficult to judge whether the projects which are yet confidential and are included in the OIS actually meet the intended Activities envisaged in the MAAP-T. In other words, it is hard to judge if these proposed projects are relevant in terms of the Activity scope and whether they contribute to achievement of related results and specific objectives shared with the Evaluator. Furthermore, the shares of these projects in the budget cannot be estimated.
- Due to confidentiality regarding the OIS documents and unavailability of information regarding the content of these projects, it is hard to judge up to what extent the related indicators are still valid or should be subject to reconstruction.

# 4. Evaluation Questions

## Relevance

### Question 1: How well do the objectives (still) correspond to the needs and priorities of the transport sector as outlined in the IPA II ISP?

The macroeconomic context and its geographical location places transport policy at the heart of development and integration with EU.[2] In this respect equally important as the further integration of the Turkish economy with the European Single Market is the full integration with the Single European Transport Area. Within this framework Turkey needs to further develop its transport infrastructure including the railway network in an integrated and competitive manner with other modes of transport, finalize the liberalization process in the railways in measures in harmony with the relevant EU Acquis.

Being in a strategic location between Europe, Middle East and Asia and having borders with EU Member States, borders along the Black Sea, the Mediterranean Sea and the Aegean Sea, Turkey offers a potential to act as a gateway to the growing markets in the East. On the other hand, incomplete and missing routes, insufficient transport infrastructure remain as impediments to providing sufficient and qualified transport networks and challenge the transport capacities in Turkey.

The transport system in Turkey is heavily unbalanced towards the road sector. Following 1950s with the Marshall Plan and the establishment of the Directorate General of Highways (KGM) the road transport developed within a noticeable pace while developments in rail and sea transport lost significant momentum and lost their effectiveness in the Turkish transport. The dominance or the road transport in Turkey leads to high levels of environmental pollution, dependence on fossil fuels, pressures on the road network, congestion, traffic accidents.[3] Besides the severe modal imbalance in freight and passenger transport towards road transport, the rail connection between Turkey and EU is inadequate. Number of deaths from traffic accidents is at a high level of 6.675 as of 2018 which is based on adverse driving habits and non- adherence to regulations. Inter-modality is underdeveloped and there is lack of an integrated approach among public institutions regarding inter-modal transport strategies and investments. Growing transport demand put pressure on national infrastructure and raise energy imports, units' costs in sustainable transport modes remain higher impeding modal shift.

[2] The macroeconomic context and its geographical location places transport policy at the heart of development and integration with EU. Among all candidate countries Turkey has the with a population of 83.154.997 with a growth rate of 1.14% in 2019 higher than the average growth rate in EU in 2019 which was 0,16% and per capita income in 2019 was USD 9.213. Foreign trade has grown at a noticeable pace and has tripled during a decade. Turkey has a customs union relationship with EU and EU is the largest trade partner of Turkey with 50% share bringing the importance of the development of transport connections between EU and Turkey to the forefront.

[3] Number of deaths from traffic accidents is at a high level of 6.675 as of 2018 which is based on adverse driving habits and non- adherence to regulations.

Within the framework of these shortcomings **Action 1** *Sustainable and safe transport* is highly relevant as it tries to address these problems.

Activity 1.1 has the objective of modernising the railway infrastructure with specific emphasis on the TEN-T railway links between Turkey and EU. Infrastructure investments in this respect have been supported addressing the lack of sufficient infrastructure in the transport links between Turkey and EU. The main Activity under this Action is the Construction of Halkalı-Kapıkule Railway Line project. Being part of the Kapıkule-Halkalı-Kars railway axis, the investment is expected to strengthen railway links between Turkey and EU and also to support Turkey to function as a gateway for the EU to Eastern markets. Equally important, is to notice that this priority project is listed in the TEN-T document and so it represents a benchmark for Accession Negotiation Chapter 21.

Activity 1.2 addresses the negative impact of transport on environment and lack of climate change related policies. International policies regarding climate change focus on mitigating emissions and coping with the environmental challenge. Policies envisaging mechanisms (such as carbon trade and international surveillance) support prevention of environmentally harmful behaviour and help building up polluter-pays principle. The extreme weight of road transport in Turkey enhances the negative consequences of transport on environment. In this respect Activity 1.2 aims to support the preparation of the Turkey's Low Carbon Sustainable Transport Development Strategy and its Action Plan. Furthermore, implementation of soft measures had also been planned to help the reduction of Greenhouse Gas emissions within this Activity. The Activity also includes reduction of the effects of noise pollution and prevention of marine pollution.

While the focus on road transport and the growing demand lead to adverse effects on environment, their negative consequences on the traffic accidents and the death toll based on bad driving habits are equally important. With 6.675 deaths from accidents the death toll level in Turkey is much higher than the EU level which was 51 per million inhabitants in 2019.[4] At this specific regard, with a view to promoting transport safety, Activity 1.3 envisages to support the implementation of the Road Traffic Strategy and Action Plan. The Activity also focuses on enforcement of road traffic rules targeting various subjects, such as: transport operators, municipalities, the education system, infrastructures, citizens and NGOs.

As far as the transport modes are concerned, both passenger and freight transport are still heavily dominated by road transport reaching 90 % share owing to its capacity to provide door to door passenger and freight transport supported by a modern fleet. By contrast, railway and maritime transport have 4.40% and 5.60% shares respectively. Therefore, competing with the road transport is a challenge for railway and maritime transport. Severe modal imbalance in freight and passenger transport, underdeveloped inter-modality, lack of integrated approach among institutions regarding inter-modal transport strategies, incomplete legal framework and insufficient institutional capacities, congestion based on population and urbanization are the major shortcomings regarding inter-modal transport. In this respect transport in Turkey needs a modal shift with investments and operations raising the effectiveness of railway and maritime in transport corridors. Accordingly, Activity 1.4[5] intends to promote inter-modality and modal shift by contributing to the implementation of the Turkish Combined Transport Strategy, already developed under an IPA financed twinning project. The Activity supports combined

[4] 2019, EU Commission,2019 Road Safety Statistics, what is behind the figures.

[5] More precisely the project: *Strengthening intermodal transport services in Turkish Railway Sector*

transport by financing a permanent platform for combined transport, preparatory studies and works for the infrastructure investments[6].

**Action 2** *Efficient Transport* covers Activity 2.1 (*Supporting ITS Strategy and other ITS measures*) and Activity 2.2 (*Supporting Research and Innovation in Transport*). Research capacities in transport are currently considered as being underdeveloped in Turkey. Effective functioning of the Transport Research Centre is critical in this respect and institution building is needed also for the MoTI – Directorate of Transport, Maritime Affairs and Communication Research Centre. Policies and incentives are lacking for promotion of transport research. Standardized and updated data is also lacking in the transport sector. ITS can be used in all transport modes for different means to reduce transport costs, congestion and the number of causalities in road accidents. Unfortunately, there persists a lack of commonly acknowledged ITS in terms of standards and terminologies. Hence, MAAP-T tries to address these shortcomings by supporting the ITS strategy and other ITS measures.

With **Action 3** *Accessible and inclusive transport*, MAAP-T addresses problematics related to the urban transport. According to the World Bank (data from 2017), the rate of urbanization in Turkey is 74.4%. This proportion has been growing rapidly during the last two decades which also leads to growing transport demand in the cities. Challenges created by high urbanization on transport are particularly evident with rising congestion; moreover, inadequacy of accessible transport services for people with older age, socially disadvantaged or for people with restricted mobility are widely registered: physical constraints and low density deter accessibility to local public transport. Severe modal imbalance in freight and passenger transport can be observed also at the urban level: units' costs in road transport being lower than in sustainable modes impede modal shift. Furthermore, the rising congestion and the modal imbalance towards road transport create adverse effects on environment and public health by leading to pollution also in urban area. In this respect Activity 3.1 (*Accessible Transport*) and Action 3.2 (*Urban Transport*) try to address these weaknesses. Activity 3.1 supports policy development, capacity building, preparation and implementation of concrete accessible transport investments and promotes cooperation among the government, local authorities and transport sector stakeholders. Action 3.2 supports the elaboration of Sustainable Urban Mobility Plans (SUMPs) and finances the implementation of related investments in cities.

The main objective of the EU has been the creation of a Single European Transport Area eliminating all the barriers between transport modes and national systems, supporting the process of integration and facilitating the emergence of multinational and multimodal operators. **Action 4** *Acquis Alignment and EU Integration* has the objective to strengthen Turkey's integration to the EU in the field of transport through progressive alignment with EU acquis. Alignment with Acquis Communautaire in transport encompasses many different areas such as market access, competition rules, market regulation, safety and security standards, structural harmonization, environmental priorities and consumer rights[7]. Turkey has a clear rationale for integrating with the Single European Transport Area and the country has to work both for alignment and to follow these dynamic changes in the EU transport policy. In this respect, incomplete legal framework and insufficient institutional capacities in some sub-sectors need for further

[6] Moreover, the project: *Construction of Çerkezköy Intermodal Terminal* builds specific infrastructure in this framework.

[7] EU transport policy has a dynamic structure with objectively identified goals namely: a) avoiding conventionally used cars in cities, b) 40% use of sustainable low carbon fuels in aviation, c) 40% cut in CO2 emissions from maritime bunker fuels, d) 50% shift of freight journeys greater than or equal to 300 km from road to rail and waterborne transport, e) majority of medium travel by rail, f) complete European high speed rail network, g) complete trans-European transport network and h) progress towards zero road transport fatalities.

training of administrative officials in EU integration; sub-sector policies and environmental issues are the major shortcomings needed to be addressed. Activity 4.1 (*Legislative Alignment and capacity building to implement the Acquis*) prioritizes concentration on acquis alignment. The Activity intends to create institutional capacity for assuming the obligations under transport policy and TEN-T including twinning, TA, services, and small scale works necessary for implementation of legislation. Activity 4.2 (*Supporting policy dialogue and technical cooperation*) aims to strengthen Turkey-EU dialogue in the field of transport supporting relations with relevant EU bodies and particularly transport agencies. In this context policy development, exchange of experience, creation of networks is supported.

## Question 2. To what extent is the MAAP-T aligned with current Turkey's transport policies and strategies?

As far as the anticipated results and the elaborated actions of MAAP-T are concerned, MAAP-T is aligned with many transport policies and strategies.

Turkish transport policies and strategies are elaborated in the 11th Development Plan and the Action Plan on Transport and Communications-Target 2023. The main objectives enlisted in the 11th Development Plan are also envisaged by the MAAP-T. The general objective set in the 11th Development Plan is to develop the multimodal and intermodal practices with a view to benefiting most from the geographical advantages of Turkey, to raise the shares of railway and maritime transport, to reduce the costs related to logistics by establishing a fast, flexible, safe secure and integrated transport system, facilitating trade and raising the competitive power of Turkey.

Other policies and measures (enlisted in the 11th Development Plan) which are also supported by the MAAP-T can be summarised as follows:

- Strengthening of integration among the transport modes and implementation of measures to remove the barriers of entry. These measures focus on the preparation of a more integrated and simple legislative structure for logistics and development of legislation on combined transport.
- Improvement of the parameters of logistics service, such as: speed, safety, predictability, quality, economies of scale flexibility and innovativeness.
- Safeguarding of the quality of the infrastructure and of the maintenance services. The establishment in road transport of a preventive maintenance system; improvement of the railway infrastructure; adoption of preventive maintenance in airports; utilisation of ITS systems in road transport for more efficient use of energy and time and raising safety in traffic.
- Reduction of fatalities in the road transport; coordination among institutions working for the traffic safety.
- Rationalisation of transport investments in terms of efficiency.
- Adoption of an integrated approach set at the national level for the formulation fo spatial plans and transport plans, provincial logistic plans, environmental plans, logistics master plans.

Under the Transport and Communications-Target 2023 Activity Plan, the strategies and actions presented are in parallel with the expected outputs of the MAAP-T are:

- Coordination among different transport modes (Activity 1.4 *Promoting Inter-modality and modal shift*)
- Establishment of the Transport Research and Training centre and support to R&D for alternative transport systems (Activity 2.2 *Supporting Research and Innovation in Transport*)
- Establishment of new corridors with the countries in the region (Activity 1.1 *Modernization of the Turkish Railways*)
- Setting the share of railways over 15% for passenger transport and over 10% for freight transport (Activity 1.1 *Modernization of the Turkish Railways*)

The Transport and Communications-Target 2023 Activity Plan will be prepared to prioritize the activities and projects. The Plan will target the transport infrastructure needed for economic and social development, balancing the transport modes according to the needs, ensuring safety of people and goods, minimizing the harm done to the environment, deriving maximum benefits from information technologies, provision of transport services in short time with no interruption, economically in conformity with international rules. Reducing the current modal imbalance by supporting intermodal transport solutions and related technologies is also an expected result in the MAAP-T.

The comparison of current and target 2023 values for selected criteria in the Transport and Communications-Target 2023 Activity Plan is provided below:

*Table 2: Share of Transport Modes in the Transport Sector*

| Share % | Current (2018) | 2023 Target |
|---|---|---|
| **Freight (ton-km)** | | |
| **Road** | 89,20% | 60 |
| **Railway** | 4,40% | 15 |
| **Airways** | - | 1 |
| **Maritime** | 5,60% | 10 |
| **Pipeline** | - | 14 |
| **Passenger Transport** | | |
| **Road** | 88,80% | 72 |
| **Railway** | 1,00% | 10 |
| **Airways** | 9,60% | 14 |
| **Maritime** | 0,50% | 4 |
| **Share %** | **Current (2018)** | **2023 Target** |
| **Freight (ton-km)** | | |
| **Fast Train line km** | 1.213 | 5.595 |
| **Share of double way railroad in total** | 12,40% | 26,30% |
| **Airport passengers (including direct and transit)** | 211 million | 266 million |
| **Divided Highway (km cumulative)** | 26.879 | 29.514 |
| **Highway (km cumulative)** | 2.969 | 3.779 |
| **Number of deaths from traffic accidents** | 6.675 | 4.900 |

*Source: MoTI, Turkey Arriving and Reaching 2019, The Transport and Communication Action Plan Strategy, Target 2023, 11th Development Plan.*

As it can be observed from the above table, road transport has a dominant position by more than 89 % share and the target for 2023 is to achieve a reduction of 29.20%. By contrast railway has only 4.40% share and the target for 2023 is to achieve a 15% share. Maritime transport has also 5.60% share targeted to reach 10% in 2023.

Under **Action 1** *Sustainable and Safe Transport*, MAAP-T intends to promote intermodal transport solutions and support technologies; in this respect, under Activity 1.4 (*Promoting Inter-modality and modal shift*) supports implementation of the Turkish Combined Transport Strategy covering activities related to inter-modality, transport and the implementation of the Logistics Master Plan. Activity 1.3 supports the Road Traffic Strategy contributing to safe transport. Under Activity 1.1 (*Improving and modernising Railway infrastructure*) the establishment of new corridors is addressed by modernising the railway infrastructure, with specific emphasis on the TEN-T railway links between Turkey and EU with the Construction of the Halkalı-Kapıkule Railway Line which is part of the Kapıkule-Halkalı-Kars rail axis. In this way, the Activity partly contributes to raising the share of railway in transport.

Under **Action 2** *Efficient Transport*, Activity 2.1 promotes supporting the ITS strategy and other ITS measures emphasizing environmental sustainability and resource efficiency. Activity 2.2 supports research and innovation in transport prioritizing the institution building to support the Directorate of Transport, Maritime Affairs and Communication Research Centre and supporting transport related research activities and research related to all sub-sectors.

**Action 3** *Accessible and inclusive transport* mainly has the objective of increasing capacity and effectiveness of urban public transport, reducing congestion and emissions. Activity 3.1 supports policy development, capacity building, preparation and implementation of solid transport investments including access of people with reduced mobility and Activity 2.3 supports the elaboration of Sustainable Urban Mobility Plans.

Chapter 14 Transport Policy and Chapter 21 TEN-T Networks (which is ready to be technically closed) are two Accession Negotiation chapters entailing necessary obligations of membership for Turkey. In this respect, MAAP-T relates to Accession Negotiation in terms of supporting the alignment with the acquis (and relevant EU policies[8]) under these two Accession Chapters. In this respect **Action 4** and more precisely Activity 4.1 (*Legislative Alignment and capacity building to implement the Acquis*) provides support to the establishment of institutional capacity for assuming the obligations of membership under Chapter 14 and 21. The Activity includes a full range of twinning, technical assistance, service, supplies and small scale works for the implementation of legislation related to market regulation, market access, safety rules, requirements to operators, consumer rights, interoperability and other aspects of EU transport policy. Activity 4.2 (*Supporting policy dialogue and technical cooperation*) aims to strengthen EU-Turkey policy dialogue in the field of transport and also support relation with EU bodies especially relevant transport agencies. The Activity also supports policy development, the exchange of experience, the creation of networks of professionals that can strengthen Turkey's integration and accession process.

[8] The backbone of the related EU policies is the creation of a Single European Transport the Sport Area by eliminating all barriers between transport modes and national systems, facilitating the process of integration, the emergence of multinational and multimodal operators. While within the process of accession negotiations alignment to EU in these areas is both the obligation and the anticipated policy there is also an economic rationale for Turkey to integrate in the Single European Transport Area. Alignment in these areas require comprehensive legal harmonization and capacity building.

# Effectiveness

## Question 1: To what extent do the observed (or probable) effects correspond to the objectives?

Understandably, as MAAP-T is still on-going, the majority of Actions have not yet achieved their operational objectives. One of the major contributions of the MAAP-T so far is to support the different aspects of the transport sector, generate debates and discussions, share knowledge within the stakeholder community and contribute to implement investment programmes.

To better understand the degree of effectiveness and correlation between the probable effects with the given objectives, it is necessary to examine the current performance assessment framework of the MAAP-T and examine the current status of the objectively verifiable indicators included at the level of outputs.

**Action 1: Sustainable and Safe Transport**

***Key indicators of Action 1:***

- Changes in the modal split (freight-ton) transport in the corridor(s)/regions invested in.
- Road death toll.
- Travelling time in cargo transport by corridor in hours (rail freight transport between Turkey and Europe namely Halkalı - Kapıkule).
- Number of road accidents with death and in injury.
- km of railway tracks rehabilitated / built.
- •Turkey's Low-Carbon Sustainable Transport Strategy and Action Plan drafted.
- Transport GHG emissions database established.
- Traffic safety enforcement methods, procedures and training of Turkish National Police updated.
- Preliminary studies prepared for the construction of intermodal terminals and junction lines.

*Table 3: Status of Indicator Action 1*

| INDICATOR | BASELINE | TARGET | CURRENT STAUS |
|---|---|---|---|
| TRAVELLING TIME IN CARGO TRANSPORT BY CORRIDOR IN HOURS (RAIL FREIGHT TRANSPORT BETWEEN TURKEY AND EUROPE NAMELY HALKALI-KAPIKULE | 8 hours | 3.5 hours | Halkalı-Kapıkule infrastructure project is currently ongoing also involving a corridor for freight transport. |

| | | | |
|---|---|---|---|
| (***Description***: Travelling time between Halkalı-Kapıkule-freight)[9] | | | |
| INCREASE IN TURKEY'S CAPACITY FOR ROAD SAFETY AUDIT. | | | Technical Assistance for the Capacity Building of KGM for the Road Infrastructure Safety Management in Turkey has recently been approved. This project will assist the enhancement of Turkey's capacity on alignmet to Directive 2008/96/EC on road safety. |
| NUMBER OF ROAD ACCIDENTS WITH DEATH AND IN INJURY. | 116.804 | 1-point decrease in the annual average increase rate as per 2010-2013 average. | Technical Assistance for the Capacity Building of KGM for the Road Infrastructure Safety Management in Turkey has recently been approved. This project will assist the enhancement of Turkey's capacity on alignment to Directive 2008/96/EC on road safety. |
| CHANGES IN THE MODAL SPLIT (FREIGHT-TON) TRANSPORT IN THE CORRIDOR(S) / REGIONS INVESTED IN. (***Description***: Halkalı-Kapıkule corridor and the performance of rail transport in Marmara Region where the MAAP-T Projects completed). | N.A. | 5% road traffic shifted to combined/rail transport | Strengthening Intermodal Transport Services in Turkish Railway Sector project has recently been approved. There is no implementation yet. |
| KM OF RAILWAY TRACKS REHABILITATED / BUILT. | N.A. | 230 km (to be revised upon project study completed) | IPA finance covers Çerkezköy-Kapıkıule railway line section which is 153 km long.20% of the physical work has been completed. |
| TURKEY'S LOW-CARBON TRANSPORT STRATEGY AND ACTION PLAN DRAFTED. | N.A. | Done | No project has been developed on Action 1.2 Environmental and Climate Change related Measures. |
| TRANSPORT GHG EMISSIONS DATABASE ESTABLISHED. | N.A. | Done | No project has been developed on Action 1.2 |

[9] Construction of Çerkezköy-Kapıkule Section of Halkalı-Kapıkule 230 km. railway started in mid of 2019. This infrastructure will reduce the travelling time in passenger and cargo transport by corridor and changes in the modal split (freight-ton) transport in the corridor. Furthermore, the project is expected to strengthen TEN-T rail network connections to the EU.

| | | | |
|---|---|---|---|
| | | | Environmental and Climate Change related Measures. |
| TRAFFIC SAFETY ENFORCEMENT METHODS, PROCEDURES AND TRAINING OF TURKISH NATIONAL POLICE UPDATED (***Description***: The overall target will be reducing the road fatalities by raising the effectiveness of traffic enforcement through increasing the deterrence of sanctions, developing training system, filling up loopholes, raising the awareness of stakeholders.) | N.A. | Methods and Procedures updated; 250 police were trained | A project could not be realized with Turkish National Police and Command of Gendarmerie for their capacity building due to lack of cooperation. |
| PRELIMINARY STUDIES PREPARED FOR THE CONSTRUCTION OF INTERMODAL TERMINALS AND JUNCTION LINES. | N.A. | The projects are completed, and the two infrastructures are being utilized. | The Construction of the Çerkezköy Project has recently been under revision, not tendered. |

The projects and studies prepared and proposed to meet the key indicators within the scope of this Action are listed with the current statues. However, these projects have not started yet. It is important that all projects are completed on time.

- The *Technical Assistance for the Capacity Building of KGM for the Road Infrastructure Safety Management in Turkey* has recently been approved. This project will assist the enhancement of Turkey's capacity on alignment to Directive 2008/96/EC on road safety and meet the Traffic safety enforcement methods, procedures.
- When it comes to *traffic safety enforcement methods, procedures and training of Turkish National Police*, it has to be registered that a project intended to jointly support the Turkish National Police and the General Command of Gendarmerie could not be prepared and implemented due to lack of cooperation between these institutions. Accordingly, the indicator TRAFFIC SAFETY ENFORCEMENT METHODS, PROCEDURES AND TRAINING OF TURKISH NATIONAL POLICE cannot be satisfied and improved safety in transport may not be fully achieved.
- *Technical assistance for reduction of infrastructure Maintenance & Renewal (M&R) costs and establishment of a Railway Infrastructure Maintenance Management System (RI-MMS) at the Turkish State Railways (TCDD)* has been also approved.
- The project *Strengthening Intermodal Transport Services in Turkish Railway Sector* has been approved and this will meet the PRELIMINARY STUDIES PREPARED FOR THE CONSTRUCTION OF INTERMODAL TERMINALS AND JUNCTION LINES indicator. This project will have positive contributions on the achievement of the expected result: "Intermodal transport solutions and supporting technologies".
- The project *Construction of the Çerkezköy Intermodal Terminal* is currently under revision by both ERA and the Contracting Authority; the completion of this project will also serve intermodal solutions. However, there is a risk of de-commitment for this project due to the length of its preparation.

- The Measure for *Struggling with the Covid-19 Pandemic in Railway Transport* is currently under revision of EUD.
- The technical assistance for *Preparation of adaptation strategy on transport infrastructure* has been withdrawn.

The projects mentioned above represent important steps in achieving the identified Key Indicators. However, another important issue yet to be tackled relates to the "*Environmental and Climate Change-related Measures*" specified in Activity 1.2. These measures will contribute to many EU objectives related to future EU transport policy and transport related policies within the EU Green Deal. The Activity will support drafting of the necessary policies, needs analyses and a database system enabling informed decision making for the authorities. Legal framework and institutional capacity will be developed to integrate environment, climate change and energy efficiency objectives into national transport investment decisions, urban transport planning and implementation.

**Action 2: Efficient Transport**

***Key indicators of Action 2***

- Logistics Performance Index.
- Volume of research spending in transport sector.
- Number of ITS applications.
- Number of research projects co-ordinated by the Ministry of Transport and Infrastructures.
- ITS solutions deployed.
- Ministry of Transport and Infrastructures Research Centre set up and functioning:

*Table 4: Status of Indicator Action 2*

| INDICATOR | BASELINE | TARGET | CURRENT STAUS |
|---|---|---|---|
| NUMBER OF ITS APPLICATIONS. | N.A. | 2 | The C-ITS Project for Turkey TURKAUS is under revision |
| VOLUME OF RESEARCH SPENDING IN TRANSPORT SECTOR. | N.A. | Euro 2 million | Enhancement of Institutional and Administrative Capacity of Directorate of Transport, Maritime Affairs and Communications Research Centre Project has recently been approved. No implementation yet. |
| NUMBER OF RESEARCH PROJECTS CO-ORDINATED BY MOTI | N.A. | 2 | Enhancement of Institutional and Administrative Capacity of Directorate of Transport, Maritime Affairs and Communications Research Centre Project has recently been approved. No implementation yet. |
| ITS SOLUTIONS DEPLOYED | N.A. | 2 | The C-ITS Project for Turkey TURKAUS is under revision. |
| MOTI RESEARCH CENTRE STRENGTHENED | N.A. | Done | Enhancement of Institutional and Administrative Capacity of Directorate of |

| | | | |
|---|---|---|---|
| | | | Transport, Maritime Affairs and Communications Research Centre Project has recently been approved.<br>No implementation yet. |

The *C-ITS Project for Turkey (TURKAUS)* is currently under revision and will support of the implementation of the ITS Strategy and Action Plan as well as connected national investments. If this project is completed, it will contribute to the achievement of the expected result "Implementation of the Intelligent Transport System (ITS) strategy", as the project will support the implementation of the ITS Strategy and Action Plan and connected national investments by the formulation of an implementation plan and the spread of ITS in the transport sector.

The project "*Enhancement of Institutional and Administrative Capacity of Directorate of Transport, Maritime Affairs and Communications Research Centre*" has recently been approved and under procurement. This project will provide institution building for the Centre, allow the financing of organisational development, capacity building of the staff, the support in the elaboration of national policies and to the transport related research and innovation activities in Turkey. The project is likely to lead to the expected result "Research and development in the Transport Sector promoted". However, the project has not started yet.

**Action 3: Accessible and Inclusive Transport**

***Key indicators of Action 3:***

- Share of users of public transport in the population (in selected metropolitan/urban areas).
- Ratio of people accessing transport information systems.
- Number of Sustainable Urban Mobility Plans developed.
- Number of preliminary studies and tender dossier prepared for public transport infrastructure projects.

*Table 5: Status of Indicator Action 3*

| INDICATOR | BASELINE | TARGET | CURRENT STAUS |
|---|---|---|---|
| SHARE OF USERS OF PUBLIC TRANSPORT IN THE POPULATION (IN SELECTED METROPOLITAN/URBAN AREAS) | N.A. | 5% | Under Action 3 only 1 SUMP project İzmir and EU Support for Promoting Sustainable Urban Mobility in Turkish Cities have been approved. All other projects are under revision. |
| NUMBER OF SUSTAINABLE URBAN MOBILITY PLANS DEVELOPED IN CITIES | N.A. | 6 | Only 1 SUMP Project in İzmir has been approved. |
| NUMBER OF PRELIMINARY STUDIES AND TENDER DOSSIER PREPARED FOR PUBLIC TRANSPORT | N.A. | 1 | No study has been done. |

| | | | |
|---|---|---|---|
| INFRASTRUCTURE PROJECTS. | | | |

The Action presents different types of projects for improving the accessibility of transport services, increase capacity and effectiveness of urban public transport, reduce congestion and emissions created by transport in urban areas.

As most of the proposed projects under Action 3 are under revision, it is not possible to know if some of these projects will actually serve the objectives under Activity 3.1 *Accessible Transport* that includes concrete accessible transport investments, supporting policy development and capacity building. Therefore, it is not possible to assess the achievement of the expected result "Accessibility of public transport further developed at urban and national level". Activity 3.2 (*Urban Transport*) was planned to be implemented by means of 13 projects to support the elaboration of SUMPs, to enhance accessibility and and finance the implementation of cycling investments in cities. Investments will cover public transport services as well as promoting the use of bicycles, developing pedestrian areas, promotion of car-pooling, construction of light rail links in cities, etc. Investments will include the remodelling of existing infrastructures, or the construction of new facilities. Moreover, these projects will help to increase public transport users in the cities.

These projects will be prepared and implemented by respective ERAs and should be completed within the lifespan of the MAAP-T. The current situation is as follows:

1. EU Support to Izmir Sustainable Mobility Plan (SUMP İZMİR) – **Approved**
2. EU Support for Promoting Sustainable Urban Mobility in Turkish Cities – **Approved**
3. Tatvan Municipality Urban Development Operation - **Under Revision** (EUD)
4. Kocaeli Sustainable Urban Mobility Plan - **Under Revision** (CA & ERA)
5. Sustainable Urban Transport for Trabzon city is starting with Trabzon Cycling Network - **Under Revision** (CA & ERA).
6. SMART (Sustainable Mobility of Ankara Revised Transport) - **Under Revision** (CA & ERA).
7. Duzce Province Bike Friendly Transport Network Operation - **Under Revision** (CA & ERA).
8. Kahramanmaraş Smart Bicycle Road - **Under Revision** (CA & ERA).
9. Livable Kayseri for Disabled and Pedestrians - **Under Revision** (CA & ERA).
10. Use Public Transport Save Future Kırıkkale - **Under Revision** (CA & ERA).
11. Development of Accessible and Safe Transport Network in Rize - **Under Revision** (EUD).
12. Development of Cycle Lanes in Konya and Increasing Their Safety - **Rejected** by EUD.
13. Kilis Municipality Urban Transport - **Rejected** by EUD.

There are 6 SUMP projects as a set target at the MAAP-T document, but this target will need a modification since there is only 1 SUMP project approved and achievement to this target seems difficulty taking into account the project preparation and implementation capacities of ERAs and the remaining time frame of the MAAP-T.

It has to be mentioned that the ongoing technical assistance envisaged under Action 5 -inter alia- provides support to SUMP preparation and other urban transport projects in the project pipeline.

Also, the World Bank will try to provide support for others within the framework of the Delegation Agreement envisaged in the Action financed by the IPA II 2019 Annual Programme.

**Action 4: Acquis Alignment and EU Integration**

***Key indicators of Action 4:***

- Degree of alignment of directives and regulations with the EU acquis.
- Status of the implementation of the National Programme for the Adoption of the Acquis.

*Table 6: Status of Indicator Action 4*

| INDICATOR | BASELINE | TARGET | CURRENT STAUS |
|---|---|---|---|
| DEGREE OF ALIGNMENT OF DIRECTIVES AND REGULATIONS WITH THE EU ACQUIS. | | | Turkey is moderately prepared in alignment in transport policy. Alignment with 12 directives has been completed while no alignment has been made for 8 directives. |
| STATUS OF THE IMPLEMENTATION OF THE NATIONAL PROGRAMME FOR THE ADOPTION OF THE ACQUIS. (***Description***: Excluding ones to be enacted within the framework of full membership perspective.) | N.A. | 100% | |

Some of the envisaged technical assistance contracts will strengthen Turkey-EU policy dialogue in the field of transport under Action 4:

- The project *Supporting Implementations Regarding Railway Safety and Regulatory Functions of Directorate General for Regulation of Transport Services (DGRTS)* has started.
- The project *Strengthening Institutional Capacity of Ministry of Transport and Infrastructure on the Transport of Perishable* is currently being procured.
- The technical assistance for *Analysis of the transport Legislation of Turkey in the process of harmonisation with the EU Acquis and supporting Turkey-EU relations in the transport sector*" currently being procured.
- The technical assistance *Systematization of the Flag State Implementation and Development of Human Resources of MoTI* is currently under revision and its procurement will start as of 2021.

These technical assistance contracts should be completed on time and are important in terms of providing support to harmonization of the Directives and Regulations within the EU Acquis.

**Action 5: Technical Assistance**

***Key indicators of Action 5:***

- Degree of implementation of the MAAP-T
- Number of projects prepared to full maturity

*Table 7: Status of Indicator Action 5*

| INDICATOR | BASELINE | TARGET | CURRENT STAUS |
|---|---|---|---|
| DEGREE OF IMPLEMENTATION OF MAAP-T | N.A. | Absorption of Euro 300 million | 34,5% |
| NUMBER OF PROJECTS PREPARED TO FULL MATURITY | N.A. | Preliminary studies for 5 projects | TA project has recently started. No preliminary studies yet. |

Degree of implementation of the MAAP-T can be described mainly through the actual disbursement of all allocated financial resources, which is currently at its 34,5% indicating that there is large room for progress in the implementation and absorption of the available resources. 71% of the total allocation of MAAP-T has been contracted as of the end of October 2020.

Recently started technical assistance *Strengthening the Transport Operating Structure and ERAs in IPA II (2014-2020) Period* will provide support to prepare projects with all technical requirements and funding modalities for transport developments.

## Question 2: To what extent different factors will influence the achievements?

Possible negative external effects, risk assessment and management capacities are critical for achievement of the results during the preparation and implementation of the activities.

One of the main impediments for achieving the results is that the technical capacities of the Municipalities determined for the preparation of the plans are insufficient. Technical capacity of some of the ERAs' to prepare the desired level of qualified project proposals is low. Therefore, the preparation of acceptable projects within the scope of Activity 3.2 was sensibly delayed. As a result, it is very difficult to achieve the target set to have the SUMPs implemented in 6 Municipalities[10].

In general terms, the low maturity of the projects raise the risks related to implementation; more specifically, these risks relate to missing preconditions, difficulties in receiving permits, expropriation processes and the scarce compliance with Directives in terms of environmental and social impact. Delays that occur due to these reasons also impact in the timely completion of the projects with consequent risk of funds de-commitment.

Unexpected problems in the performance of the Contractors may also influence the successful achievement of the MAAP-T results, especially in completing the job and finalisation of financial disbursement.

To date, the Covid-19 pandemic shows no sign of abating. In fact, it's just the opposite with infection rates, hospitalisations and sadly, deaths, all on the increase across the world. Regarding this pandemic all uncertainties remain and the effects of the Covid-19, which have not yet fully formed, are likely to be serious. Covid-19 pandemic brought challenges to MAAP-T implementation and it is likely to amplify the

[10] See the section "*Reconstruction of the Intervention Logic*"

negative effects of immature projects. The pandemic caused staff shortage and made difficult its recruitment, moreover it entailed idle machinery and equipment among works contractors. In the case of prolongation of the pandemic, it is highly probable that the works contractor may issue several claim notices with time and cost effects.

A very critical factor for achievement to the results is the sustainability of the trained and experienced personnel. Changes in the experienced personnel within EUID and ERAs might seriously lead to delays and hamper achievement. Nevertheless, the trained personnel within EUID was successfully sustained to date. (more detail provided in Efficiency Section).

Unpredictable natural disasters such as earthquakes, storms, heavy rains can have detrimental effects particularly on the progress of infrastructure projects.

## Efficiency

### Question 1: May the OS pursue another way of managing the IPA resources that may produce more results or may use resources sparingly, yet maintaining the same level of achievements?

The Evaluation Criteria followed to answer to this question takes into account the following:

- Absorption level of the MAAP-T budget
- Maturity regarding the projects that have been formulated and prepared/number of projects approved
- Human resources working for MAAP-T as an input

As far as use of the financial resources are concerned, the efficiency should be assessed both from the points of view of the financial expenditures and the number of projects performing satisfactory progress. The distribution of the MAAP-T budget among the Actions is presented below:

*Table 8: Distribution of the MAAP-T Budget (2014-2020 after amendment)*

| # | MAAP Transport Action | With Entrusted Entity (€ million) | With IPA 2 beneficiary (€ million) | Total (€ million) | Share (%) |
|---|---|---|---|---|---|
| 1 | Sustainable and Safe Transport | 0,45 | 295,75 | 296,2 | 84,5 |
| 2 | Efficient Transport | 0,45 | 5,4 | 5,85 | 1,7 |
| 3 | Accessible and Inclusive Transport | 3,4 | 21,95 | 25,3 | 7,2 |
| 4 | Acquis Alignment and EU Integration | | 15 | 15 | 4,3 |
| 5 | Technical Assistance | | 8 | 8 | 2,3 |

| | | | | | |
|---|---|---|---|---|---|
| | **TOTAL** | **4,3** | **346,1** | **350,4** | **100** |

Action 1 Sustainable and Safe Transport represents 84,5% of the total allocated budget.

As such a large percent of the MAAP-T budget has been allocated under a single project, the progress in the expenditure raises the absorption level of the budget to a noticeable extent through a single approval. Already spent 71% signals for a satisfactory absorption level in the future. However, as the actual disbursement share is currently 34,5%, data show that there is still significant room for progress in the MAAP-T implementation.

By all means, the assessment of efficiency has to be evaluated also by analysing the progress in terms of the number of projects, as it is presented in the table below:

*Table 9: Number of the Projects by Action*

| Action | Approved Projects | Under Revision | Rejected by EUD | Under Preparation | Withdrawn | Total |
|---|---|---|---|---|---|---|
| **Action 1** | 4 | 2 | - | - | 1 | - |
| **Action 2** | 1 | - | - | 1 | - | - |
| **Action 3** | 2 | 9 | 2 | - | - | - |
| **Action 4** | 3 | 1 | - | - | 1 | - |
| **Action 5** | 1 | - | - | - | - | - |
| **Total** | 11 | 12 | 2 | 1 | 2 | 28 |
| **Share** | **39%** | **43%** | **7%** | **4%** | **7%** | **100%** |

Excluding the Halkalı-Kapıkule project and its supervision there are 27 other projects in the pipeline, each one needing individual approval. It can be noted from the table above that 64% of the projects in the pipeline are either under revision, under preparation or either withdrawn which signal a shortcoming in the maturity of the projects. Covid 19 pandemic which brought challenges to implementation is likely to amplify the negative consequences of having immature projects in the pipeline. Therefore, while the concentration in terms of budget eases the budget absorption, in terms of number of projects this concentration enhances the efforts in terms of revising documents for receiving approvals. Furthermore, while there is significant concentration in Activity 1.1 thanks to the Halkalı-Kapıkule project absorbing 87 % of **Action 1** budget, there is no expenditure registered regarding Activity 1.2.

The table illustrates that the problem is even more acute within **Action 3** since there are only 2 projects approved out of the total project pipeline and 11 projects are still being revised. Although institutional capacity varies significantly across ERAs (primarily Municipalities), this situation raises questions on the quality of the project documents and maturity of the project and illustrates the fact that some Municipalities need for technical assistance and capacity building on preparing project documents. According to the information received from the Procurement Unit of EUID, it has been noted that Covid 19 has seriously affected the procurement stage. This was natural as participation of staff at the premises for completion of procurement proved very difficult due to the confinement which delayed the contracts' awarding significantly. Similarly, also ERAs had difficult in implementation due to the confinement. Absorption of funds and de-commitment can be a risk for Action 3. While preparation of projects is basically under the responsibility of the ERAs, it has to be remarked that more possible

interaction between EUID and the ERAs (primarily the Municipalities) is needed. Furthermore, there is also a problem noticed with the timing set for the calls for proposals to Municipalities. Similarly, the World Bank assistance planned for preparation of SUMP projects in the provinces could have started much earlier.

As far as efficiency of spending the funds is concerned, human resources are an important factor. Currently, EUID staff is composed of 28 elements. The distribution of posts according to the different Units is provided below:

*Table 10: Staff distribution within EUID Units*

| Programming and Monitoring | Procurement | Contract Management | Financial Management | Technical Assistance and Human Resources | Quality Assurance |
|---|---|---|---|---|---|
| **2 EU Experts** | 1 Architect | 5 EU Experts | 4 EU Experts | 1 EU Expert | 2 EU Experts |
| **1 Urban Planner** | 5 engineers | 1 Assistant EU Expert | 2 Assistant EU Experts | 1 Assistant EU Expert | 1 Maritime Expert |
| **1 Engineer** | | | | 1 Transport and Communication Expert | 1 Civil Servant |

Among the EUID personnel, 65% have been working for more than 6 years in their posts, indicating a high human resources' retention level. All of the personnel are graduates from Universities in the related fields of competence.

## Coherence

### Question 1: How do the MAAP-T fit in with one another and with the objectives?

When MAAP-T is viewed from a holistic perspective, there are interactions and harmonies between existing Actions and within each Action. Therefore, it is important to evaluate the relationships between the Actions and the Activities. The analysis of coherence includes an objective hierarchy assessment (result chain) with Overall Objective, Specific Objective, Results and Actions and up to what extent actions lead to the intended results, how the results lead to the specific objective and what is the contribution of the specific objective to the overall objective.

While making all these evaluations, the following criteria should be taken into account:

- The logical support chain among Activities of different Actions,
- To what extent Activities in the Actions are mutually supportive and reinforcing to Activities in other Actions,
- To what extent the Activities are supportive of the Action results,

- To what extent the Actions are supportive of the expected MAAP-T results.

The assessment of coherence for each Action follows:

Activity 1.1 intends to improve and modernise railway infrastructure between Turkey and EU. The main infrastructure envisaged in the Activity is the construction of the Halkalı-Kapıkule railway line, which directly connects Turkey to the TEN-T rail network through Bulgaria. The implementation of this Activity will positively affect both the improvement of transport safety" and the promotion of inter- modality and modal shift, hence this intervention will directly affect Activity 1.3 (*Transport Safety*) and Activity 1.4 (*Promoting inter-modality and modal shift*).

Activity 1.2 includes the identification, preparation and implementation of climate change related mitigation and adaptation policies in Turkish Transport Sector. The Activity is based on legal, administrative, technical, institutional and operational gaps/needs analysis on low carbon sustainable transport. As a result of the interventions planned with this Activity a number of other MAAP-T Actions will be enhanced, especially Activity 2.2 (*Supporting Research and Innovation in Transport*), Activity 3.2 (*Urban Transport*), Activity 4.2 (*Supporting policy dialogue and technical cooperation*) and Activity 5.2 (*Project Pipeline Development*).

Activity 1.3 comprises to implement of the works of the Road Traffic Strategy and Action Plan. The main aims are on the enforcement of road traffic rules, and activities targeting transport operators, municipalities, the education system, infrastructures' design requirements, citizens, and Non-Governmental Organizations (NGOs). Support will also concentrate on capacity building at the Ministry of Transport and Infrastructures, the Turkish National Police (EGM) and the General Command of Gendarmerie, and the procurement of equipment needed. Activity 1.4 Promoting Inter-modality and Modal Shift, whole Action 3 Accessible and Inclusive Transport, Action 4 Acquis Alignment and EU Integration and Activity 5.2 Project Pipeline development will benefit positively from the results of this Activity and contribute to the success of MAAP-T.

Activity 1.4 is promoting inter-modality and modal shift and contributes to the implementation of the Turkish Combined Transport Strategy, already developed under an IPA financed twinning project, which covers, among others, activities related to inter-modality, the development of a Transport and Logistics Master Plan and the connected legislative framework. The promotion of inter-modality will be supported by the implementation of whole Action 3 (*Accessible and Inclusive Transport*) and Activity 5.2 (*Project Pipeline development*).

Activity 2.1 entails the supporting mechanism of the implementation of the ITS Strategy and Action Plan as well as connected national investments. Particular emphasis is placed on environmental sustainability, resource efficiency, and high-quality of service to passengers through the extensive use of modern IT and communication methods. This Activity provides positive impact to the Activity 1.3 (*Transport Safety*), Activity 1.4 (*Promoting inter-modality and modal shift*), whole Action 3 (*Accessible and Inclusive Transport*) and Action 4 (*Acquis Alignment and EU Integration*).

Transport related research and innovation activities will be supported under the Activity 2.2 (*Supporting Research and Innovation in Transport*); the Activity supports the organisational development, staff capacity building and the elaboration of national policies and strategies for transport research, as well as incentives to promote transport research in all sub-sectors. The first priority is institutional building to

support the Department of the Ministry of Transport and Infrastructure Research Centre. This activity will provide positive impact throughout the whole MAAP-T operations.

Action 3 (*Accessible and Inclusive Transport*) envisages two main Activities, these are Activity 3.1 "*Accessible Transport*" and Activity 3.2 "*Urban Transport*". Both provide positive and complementary effect to the Action 4 (*Acquis Alignment and EU Integration*).

Action 4 (*Acquis Alignment and EU Integration*) and Action 5 (*Technical Assistance*) provide positive affect to the managing capacity of the MoTI. These Actions are directly supportive of the expected achievement of MAAP-T results.

## Question 2: To what extent is MAAP-T coherent with wider EU policy?

The Evaluation Criteria followed to answer to this question takes into account the following:

- To what extent the future objectives of the EU transport policy are embedded in the design of the Actions and Activities including de-carbonization, modal shift, transport safety and European transport corridors.
- To what extent the future objectives of the Green Deal regarding the transport policy are embedded in the Actions and Activities such as multi modal transport, automation in transport, de-carbonization, alternative fuels, sustainable urban transport.

EU transport policy is a dynamic policy and renews itself according to new conditions and new needs. Therefore, the alignment process of Turkey and provision of support in this respect should allow for changes in the transport policy. Measures that prepare Turkey for the new EU policies anticipated in transport are embedded in the content of MAAP-T.

The main objectives of the EU transport policy can be summarised as follows.

By 2050, the EU wants a 60% cut in transport-related greenhouse gas emissions versus 1990 levels,

- no more conventionally fuelled cars in cities
- 40% use of sustainable low-carbon fuels in aviation
- 40% cut in $CO_2$ emissions from maritime bunker fuels
- 50% shift of freight journeys greater than or equal to 300 km from road to rail and to waterborne transport
- majority of medium-distance travel completed by rail
- complete European high-speed rail network
- complete trans-European transport network
- progress towards zero road-transport fatalities

Another important feature within the future perspectives of the transport policy is the Green Deal. The Green Deal involves the EU commitment to tackling climate and environment related challenges. In this respect the Green Deal is a new growth strategy aiming to transform EU into a resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use. As transport accounts for a quarter of the EU's

greenhouse gas emissions transport policy needs to be revised accordingly. In this framework the following measures are considered critical.

Multimodal transport needs to be enhanced to raise the efficiency of the transport system. A substantial part of the freight by road is planned to be shifted to rail and inland waterways. Multimodal freight operations involving rail and waterborne transport will be supported under combined transport. In aviation, the Single European Sky is expected to help achieve significant reductions in aviation emissions. Automated and connected multimodal mobility is expected to play an increasing role, make transport more efficient and cleaner with smart traffic management systems enabled by digitalisation. In this respect, smart applications and mobility as a service solution are planned to be applied. Transport prices are expected to reflect impact on environment. This measure includes ending subsidies for fossil-fuels, extending emissions trading to the maritime sector, reducing free allowances allocated to airlines under emissions trading, effective road pricing extending the scope of vehicles considered with a view to make progress in the application of the 'polluter pays' and 'user pays' principles amending the Euro-vignette Directive or withdrawing if necessary.

Production and deployment of sustainable alternative transport fuels are to be enhanced. By 2025, about 1 million public recharging and refuelling stations will be needed for the 13 million zero- and low-emission vehicles expected on European roads. The European Commission plans to support the deployment of public recharging and refuelling points where persistent gaps exist, notably for long-distance travel and in less densely populated areas. Legislative options to increase the production and uptake of fuels for different types of transport are considered.

Measures will be taken to make transport less polluting in cities addressing emissions, urban congestion and improved public transport. Legislation on $CO_2$ emission performance standards for cars will also be revised. Actions will be taken for access of the most polluting ships; dock ships will be obliged to use shore-side electricity.

As far as progress towards zero road-transport fatalities objective is concerned, MAAP-T **Action 1** *Sustainable and Safe Transport* aims to achieve a safer, transport system. The technical assistance for the *capacity building of KGM for the road infrastructure safety management in Turkey* has the objective of harmonising Turkish legislation with Directive 2008/96/EC and enhancing capacity at KGM to implement road infrastructure safety management, resulting in enhanced road safety.

Within the context of 50% shift of freight journeys greater than or equal to 300 km from road to rail and to waterborne transport, the *construction of Halkalı-Kapıkule railway* project aims to connect Turkey to TEN-T rail network and also contributes to modal shift of Turkey towards railway transport. More precisely, this project includes 200 km freight transport and so it contributes to the Turkish transport system with respect to the EU objectives as the majority of medium-distance travel is done by rail; this complies with the trans-European transport network and since the project also includes a high-speed railway network, it also complies with the European high-speed rail network.

As far as multi modal transport is concerned Activity 1.4 (*Promoting inter-modality and modal shift*) contributes to the implementation of the Turkish Combined Transport Strategy. This strategy covers activities related to inter-modality, the elaboration of the Logistics Master Plan and the respective legislative framework. A comprehensive framework with time-dedicated action plan for intermodal freight

services - including identifying the necessary strategic infrastructure connections - will be developed. Furthermore, capacity building support will be provided for the railway in order to improve intermodal transport operations in rail freight services. The construction of an intermodal terminal in Çerkezköy will be financed under the project *Construction of Çerkezköy Intermodal Terminal* Project supporting the development of combined transport in Turkey.

Activity 1.2 (*Environmental and Climate Change related measures*) contributes to many EU objectives related to future EU transport policy and transport related policies within the Green Deal. The Activity is meant to support the drafting of the necessary policies, needs analyses and a database system enabling informed decision making. Legal framework and institutional capacity are expected to be developed to integrate national transport investment decisions, urban transport planning and implementation with environment, climate change and energy efficiency objectives. Operations are expected to include analysis on Turkey's legal, administrative, technical, institutional and operational framework; when it comes to low carbon sustainable transport, the drafting of Turkey's Low Carbon Sustainable Transport Development Strategy and Action Plan is envisaged, establishing a full-fledged environment and climate change database system, increasing the capacities of related departments of MoTI in conducting environmental impact assessment, reducing GHG emissions by road transport, maritime and aviation sectors. These achievements are planned through a set of soft measures namely legislative arrangements, financial incentives and capacity building, integration of national low carbon sustainable transport policies and projects into urban transport and land use plans. In this framework MAAP-T will concentrate on the areas of the NCCAP such as projections for the transport sector by calculating GHG emissions, limitation options, mitigation potentials and costs making regulations on limitation of $CO_2$ emissions in new automobiles and passenger ships, raising coordination mechanisms for limitation of GHG emissions increase in the transport sector and adaptation of the infrastructure to the impacts on climate change, legislative arrangements for Turkey's international airways and marine with regard to emissions trading and development of climate sensitive urbanization and transport strategies and high energy efficiency. When this design of Activity 2.1 is analysed and compared with the related transport measures under the Green Deal, it appears evident that this Activity represents a valuable base and drive change in the transport sector for achieving many intended objectives under the Green Deal.

Automated and connected multimodality can be reinforced to a great extent by intelligent transport systems. Under **Action 2** *Efficient Transport*, with the overall aim of raising the efficiency of Turkish transport, Activity 2.1 supports the implementation of the ITS Strategy and Action Plan. The Strategy envisages to raise environmental sustainability, resource efficiency by extensive use of IT and communication methods. Spreading ITS systems, environmentally friendly modes of urban transport also reducing congestion and pollution. Under Activity 2.2, support is provided to the institution building in MoTI Maritime Affairs and Communication Research Centre and thereby enhancement of transport related research is also expected to be supportive of automated and connected multimodal mobility.

The approach in **Action 3** and namely in Activity 3.2 (*Urban Transport*) is expected to extensively support transport becoming less polluting in cities. Under this Activity, the elaboration of SUMPs is supported and these include the promotion of use of bicycles car-pooling, the construction of light rail links as well as better public transport services.

# EU Value Added

## Question 1: To what extent do the issues addressed by the MAAP-T continue to require EU support?

The Evaluation Criteria followed to answer to this question takes into account the following:

- Growing needs of the Turkish transport sector which would also seek external support such as the growing need for logistic centres.
- Support to preparation for funding related to future alignment to EU transport policies.
- Support needed for enhancing integration of Turkey to EU transport network.

The issues addressed by MAAP-T which still require EU support are:

- The Logistic Centres
- TEN-T Network.

Establishment of logistics centres are important for Turkey as they support inter-modality, bring cost-effectiveness raising the competitiveness in transport. Turkey targets the establishment of 23 logistic centres among which 11 have already been established. Turkey is 43rd in the Logistic Performance Index and plans to be 25th by 2023. The establishment of logistic centres requires financing for their infrastructure investments and technical assistance regarding their organisation and know-how acquisition. Turkey would need EU funding to support this target and the setting up of the remaining logistic centres is the first reason for seeking continuation of EU support.

TEN-T railway lines is another area where Turkey would seek EU support. Strengthening TEN-T network to EU is an accession requirement.

Data regarding the TEN-T network in Turkey is as follows:

*Table 11: TEN-T Network Data in Turkey*

| TEN-T Turkey | The Comprehensive Network | The Core Network |
|---|---|---|
| Highway (km) | 17,000 | 9,000 |
| Railway(km) | 16,000 | 7,500 |
| Harbours | 27 | 12 |
| Airports | 36 | 11 |
| Highway Railway Terminals | 31 | 13 |

*Source: MoTI*

Turkey also needs support for additional TEN-T lines in Central and Eastern Turkey, completing north south connections toward the Mediterranean. Railway connection between European and Asian networks through the third Bosporus Bridge. Support is needed until all TEN-T network in Turkey is completed.

Turkey would still need EU support for achieving the EU transport policy objectives and particularly for the Green Deal. With the high dominance of the railway as a transport mode Turkey still needs a modal shift away from the road transport towards railway and maritime transport. The dynamics in the region compels Turkey to develop its infrastructure on inter-modality. Expected effects of intermodal transport which are still valid are: reduction of social costs on road safety, air pollution, congestion, energy and raw materials consumption. In this framework, sea-rail operations, short sea shipping routes, port-rail inter-modality, rail freight corridors-land inter-modality and development of combined freight terminals are still among the issues that require EU support.

Turkey continue to develop high speed railways which is also an area of development in transport in the EU. Ankara-İzmir and Ankara-Sivas are examples of planned high-speed railways. Turkey would still need EU support in this respect.

Development of intelligent transport systems for effective traffic management, reduction of congestion owing largely to the rising urbanization, reducing pollution in urban areas will need EU support as these issues are likely to continue for the medium term. Improving transport safety is an issue to be tackled in the medium and long term. Policies aiming to reduce and control the level of road accidents, fatalities and injuries also need EU support.

Many provinces in Turkey still need to develop accessible and sustainable transport and to build institutional capacities in this respect may still find room for the use of EU financial assistance.

## Sustainability

### Question 1: Which are the environmental consequences of delivery of services made possible by MAAP-T?

Within the scope of MAAP-T and in the implementation of all infrastructure works envisaged, it is indeed unavoidable to take into account all necessary precautions for the protection of the environment and natural life. More specifically, MAAP-T has two main activities related with environmental sustainability.

- **Activity 1.2 (*Environmental and Climate Change-related measures*)**:
  MAAP-T supports the identification, preparation and implementation of climate change-related mitigation and adaptation policies in the transport sector. These include legal, administrative, technical, institutional and operational gaps/needs analyses about low-carbon sustainable transport, carried out in line with the National Climate Change Action Plan (NCCAP) and the Environmental Effects Assessment Panel (EEAP). Foreseen interventions also include reducing the effects of noise pollution and preventing marine pollution. The activity contributes to the achievement of result 2 under Action 1 ("Investments serving environmental sustainability and climate change related mitigation and adaptation measures are implemented").

It is noteworthy that no project under this Activity has been submitted so far. The rationale behind the choice of not developing a project under this Activity can be attributed to the need to await the outcomes of similar projects being carried out by Ministry of Environment and Urbanisation which has been

covering the transport sector also. However, in reconstructing the intervention logic of MAAP-T, it is possible to state that abandoning the development of this Activity proves to have some serious limitations and this decision has to be reconsidered. Such limitations are summarised below:

- The Activity is crucial for alignment with the EU de-carbonisation policies where non alignment could result with decarbonisation taxes on exported products to EU, seriously hampering the free movement of goods from Turkey to EU. Also, non-alignment with the implementation of Green Deal principles could result with barriers to transport from Turkey to EU (and within EU).
- Green Deal in Europe is a policy mainly instrumental to tackle environmental and climate related challenges and involves also many policies related with transport. In order to align with the Green Deal policies Turkey has to identify climate change related transport policies and start implementing them[11]. Abandoning this Activity will deprive the Turkish transport from an approach towards climate change to base and a guide the achievement of Green Deal transport objectives and fulfilling related policies.

By all means, while climate related transport policies have both a transport and climate change and environment dimension the main responsible to develop the Activity is still the Ministry of Transport and Infrastructure which also master the information and experience regarding transport policies. Furthermore, there is not much reference to transport in the current Sectoral Operation Programme for Environment. Therefore, this Activity should best be implemented under the leadership of the Ministry of Transport and Infrastructure in cooperation with the Ministry of Environment and Urbanization (MoEU).

One of the options for recuperating funds to implement this Activity from the original allocation made in the MAAP-T, can be to remove some of the funds currently allocated to implement Action.3 and namely Activity 3.2 (*Urban Transport*). Necessary resources to implement Activity 1.2 may be taken out from those SUMP projects that were considered too immature and their timely implementation proved to be unrealistic[12]. A specific technical assistance can be designed and delivered by EUID to manage the necessary cooperation between EUID and relevant counterparts in the MoEU.

Another option to support inter-ministerial coordination between EUID and MoEU to implement this Activity outside the allocation of the MAAP-T can be allowed through a Framework Contract launched by the EU Delegation.

- **Activity 3.2 (*Urban Transport*):**
  Activity 3.2 will support the elaboration of SUMPs and finance the implementation of investments in cities. Investments will cover public transport services as well as promoting the use of bicycles, developing pedestrian areas, promotion of car-pooling, construction of light rail links in cities, etc. Investments will include the remodelling of existing infrastructures, or the construction of new facilities.

[11] These policies include reducing transport emissions by 90% in 2050, price reflecting the impact made on environment and on health, application of the polluter pays principle, increasing of sustainable alternative fuels. Adaption to these policies first needs a well elaborated transport strategy that aim to reduce transport emissions.

[12] For example, the funds originally allocated to the projects rejected by the EUD like. “Development of cycle lanes in Konia and increasing their safety” and “Kilis Municipality Urban Transport”

Smart bicycle roads, encouragement of public transport usage, development of accessible and safe transport networks, liveable cities for disables and pedestrians, preparation of sustainable urban mobility plans, safety plans of passengers, bicyclists and pedestrians, investment plans that protect environment, plans for reducing emissions are all very sensitive subjects for the Urban Transport. Mostly due to the scarce preparation and capacities of the ERAs (mainly Municipalities), this activity is not fully implemented yet. During the preparation of the proposals, ERAs should provide all necessary studies such as: environmental impact assessment, social assessment, financial and cost-benefit analyses and to obtain all these information at the acceptable quality level proved to be rather challenging. To date, a considerable number of projects that were put forward by the ERAs has been rejected -or repeatedly required for being revised- due to lack of maturity and quality of the respective documentation.

## Coordination

### Question 1: Which institutions are involved in the MAAP-T implementation and how frequent is the mutual communication between the relevant stakeholders

The Evaluation Criteria followed to answer to this question takes into account the following:

- Coordination within EUID Units
- Coordination of EUID within other relevant MoTI Directorates
- Coordination with ERAs
- Coordination with other OSs
- Coordination with other relevant institutions.

As far as the design of the MAAP-T is concerned, many institutions are planned to be involved in MAAP-T implementation, these are among others:

- OS (EUID) as managing and contracting authority
- MoTI
- TCDD
- KGM
- The Turkish National Police (EGM)
- The General Command of Gendarmerie
- ERAs at the local level (mostly Municipalities)

The main Units of EUID consist of Programming, Monitoring and Evaluation (PMEU), Procurement (PU), Contract Management (CMU), Financial Management (FMU), Technical Assistance and Human Resources (TAHRU), Quality Assurance and Control (QACU). These Units have different responsibilities ranging from programming of Actions to completion of projects implemented under these Actions.

PMEU is responsible for the project application process, formulation of the OIS and follow up the approval of OIS by the EUD. PMEU assesses, selects and prioritises the project applications coming from the ERAs according to their relevance to objectives and priorities of the MAAP-T. Once the OIS is

approved by EUD, the dossier is handed to the PU for commencement of the tendering process. PU prepares the tender dossiers and it is responsible from the whole development of the procurement procedure, from the preparation and publication of Contract Notices to the contracts award. Once the awarded Contractor is selected and contracts for respective tenders are approved, PU hands over the signed contract to the CMU for the implementation.

The dialogue between these Units is very important and should allow PU to follow with dialoguing with the ERAs about related references and specifications to properly develop the procurement and define eligibility criteria. Similarly, communication between the EUID and the ERA is critical to create a mutual understanding on the requirements at each stage of the cycle from the start of the contract notice until the end of implementation of the awarded contracts. The low capacity within some of the ERAs on project preparation led to low quality project documents prepared by these institutions. This factor leads to problems in efficiency. During the preparation of project proposals, ERAs undertake rather autonomously the preparation of respective programming and procurement documentation (OIS, ToR, technical specifications, etc.), either through their own services or by means of technical assistance. Furthermore, ERAs identify their needs, plan for and provide necessary co-financing. However, many of the ERAs still need for more guidance especially in the identification of the timing, budget and all other complementary issues of their projects. In this respect, the delays in preparation of projects proposals and lack of qualified project documents receiving approval from both EUID and EUD proved very difficult especially for the ERAs (mainly Municipalities) as far as the development of Action 3 is concerned. This kind of guidance is of course expected from EUID. Despite several informative meetings organised by EUID in the past, this situation illustrates the fact that -while preparation of the project documents remains the responsibility of the ERAs- still a more cooperative process between EUID and these Municipalities is required.

MoTI General Directorate for Infrastructures and Investments is responsible from the planning of the infrastructure investments in transport. This responsibility also includes the railway investments the railway investments and potential railway infrastructure investments to be financed under IPA. Urban transport has been planned by a section separately within this General Directorate which is in charge of dialoguing with the Municipalities. As far as IPA financing is concerned, dialogue between EUID and the General Directorate of Infrastructures and Investments is critical since while the General Directorate is responsible from planning of the investments, EUID discusses with EU on possibilities of finance for these investments and undertakes the programming accordingly.

Cooperation between EUID with other OS and other relevant institutions is also critical since there are overlapping areas in the IPA funding among transport, environment and industrial policies, each one managed by different OS in different Ministries. As prescribed by the IPA regulation in terms of monitoring, EUID undertakes regular meetings with the other OS to exchange views and coordinate approaches. On the other hand, cooperation and joint work are also necessary at the operational level, in the implementation of some of the Actions.

Acticity 2.1 (*Environmental and Climate Change related measures*) is such an Activity with overlapping areas of MoEU (being the OS for the sectoral programme on environment) and other relevant institutions. This Activity includes implementation of climate change related mitigation and adaptation policies in the transport sector which have to be in line with Turkey's National Climate Change Action Plan (NCCAP) and Environmental Effects Assessment Plan (EEAP). In this respect the principal output

of this Activity is planned to be drafting of the Turkey's Low Carbon Sustainable Development Strategy and Action Plan which of course involves both the transport and the environment dimensions. The coordination among OS (EUID and MoEU) and other relevant institutions needs to be treated in detail coherence to allow joint implementation. It has been noted that there has been no effort for such a cooperation and from the part of the MAAP-T there is no work and expenditure made so far in this respect.

Activity1.3 (*Improving Transport Safety*) envisages the building of capacities of the Turkish National Police and the General Command of Gendarmerie. It has been noted that cooperation among these institutions could not materialize. Therefore, the envisaged project to support capacity building of these institutions could not be prepared.

# 5. Reconstruction of the Intervention Logic

Under the framework of circumstances sourcing from time, limits of institutional capacities and risk of de-commitment of funds, some changes are proposed to reconstruct MAAP-T intervention logic. The reconstruction involves changes related to Activities and the related process indicators, without changing the expected results.

In this context the following changes are proposed.

As far as the structure of the MAAP-T is concerned, the Programme is divided into 5 Actions each one addressing a different topic and respective Activities (included within the Actions) with specific outputs and tasks.

The structure of the MAAP-T is presented below:

- **Action 1. Sustainable and safe transport**
  - Activity 1.1 Modernization of the Turkish Railways
  - Activity1.2 Environment and Climate Change-related measures
  - Activity 1.3 Transport Safety
  - Activity 1.4 Promoting inter-modality and modal shift
- **Action 2 Efficient Transport**
  - Activity 2.1 Supporting ITS Strategy and other ITS measures
  - Activity 2.2 Supporting Research and Innovation in transport
- **Action 3 Accessible and Inclusive Transport**
  - Activity 3.1 Accessible transport
  - Activity 3.2 Urban transport
- **Action 4 Acquis Alignment and EU Integration**
  - Activity 4.1 Legislative alignment and capacity building to implement the Acquis
  - Activity 4.2 Supporting policy dialogue and technical cooperation

## Action 1 Sustainable and safe transport

Under this Action there is no project developed within the framework of Activity 1.2 *Environment and Climate Change-related measures*. As analysed in detail under the Evaluation Question in the Sustainability criteria, the removal of this Activity has many negative consequences particularly for alignment to changing perspectives in EU transport policy and the Green Deal. Equally important are the negative impacts on EU Turkey transport relations and the free movement of goods between the two sides. Suggestions for institutional engagement and financing arrangements were made. As there is requirement for a serious cooperation between MoTI and MoEU and the remaining time for project preparation, tendering and implementation is rather short it has been very strongly recommended to progress in this section with a technical assistance that could support inter-ministerial coordination between MoTI and MoEU and the key ERAs.

Under Activity 1.3 *Improving transport safety*, the technical assistance for the capacity building of KGM for the road infrastructure safety management in Turkey has recently been approved. This assistance will be provided for the enhancement of Turkey's capacity on alignment to Directive 2008/96/EC on road safety. Another intervention envisaged within the framework of this Activity is aiming to establish traffic safety enforcement methods, procedures, capacity building within MoTI, Turkish National Police and the General Command of Gendarmerie and to train the staff of the Turkish National Police. This project could not be prepared and implemented. As there is no sign for possible future implementation of this project the following related indicator is not relevant anymore and should be deleted:

| Indicator | Target |
|---|---|
| **TRAFFIC SAFETY ENFORCEMENT METHODS, PROCEDURES AND TRAINING OF TURKISH NATIONAL POLICE UPDATED** (***Description*: The overall target will be reducing the road fatalities by raising the effectiveness of traffic enforcement through increasing the deterrence of sanctions, developing training system, filling up loopholes, raising the awareness of stakeholders.)** | Methods and Procedures updated; 250 police were trained |

## Action 3 Accessible and Inclusive Transport

For what concerns Action 3 *Accessible and Inclusive Transport*, the envisaged operations face a number of challenges in bringing the proposed projects to a mature stage and, consequently, there is serious risk of de-commitment. Action 3 largely depends on the commitment and institutional capacities of Municipalities (the main ERAs of this Action). The target originally set for Activity 3.2 (*Urban Transport*) is the preparation of 6 SUMPs. However, planning of SUMPs faces challenges in both large and small provinces owing to different factors. The key features and relevant problematics of SUMP related projects can be summarised as follows:

- SUMP regards an entire urban area including its commuter hinterland rather than a municipal administrative region,
- SUMP addresses all modes and forms of urban transport,
- Elaboration of SUMP requires a comprehensive review of the current situation and establishment of a baseline against which progress can be measured,
- SUMP needs for performance indicators to describe the current status of urban transport system with many different parameters, namely its quality, accessibility, infrastructure, land use, spatial development, safety and security, energy, environment, social inclusion, gender equity, economic development, etc. All these indicators require timely access to data and statistics,
- SUMP covers many areas of transport such as multimodal mobility, road safety, urban logistics with urban freight delivery, reduction of transport GHG emissions pollutants and noise pollution, use of ITS applicable to all modes,
- SUMP emphasizes aspects of participatory approach, advocacy and ownership, planning vertical and horizontal integration for institutions and design appropriate mechanisms for monitoring that allow active and aware participation of citizens.

When acknowledging all the above factors, the involvement of so many different parameters requires considerable institutional capacity with expertise in many different areas; the preparation of SUMP is

difficult in both large and small provinces: while the dimension addressed in large cities is challenging by definition, data collection is not well developed in small provinces; fulfilling all the above requirements proved to be a very ambitious challenge.

Projects submitted under Activity 3.2 for the preparation of SUMPs and their current status is presented in the table below.

*Table 12: Situation of projects development in Activity 3.2*

| TITLE | STATUS |
|---|---|
| **EU Support for Promoting Sustainable Urban Mobility in Turkish Cities** | Approved |
| **EU Support to Izmir Sustainable Mobility Plan (SUMP İZMİR)** | Approved |
| **SMART (Sustainable Mobility of Ankara Revised Transport)** | Under Revision-PIN published |
| **Tatvan Municipality Urban Development Operation** | Under Revision |
| **Kocaeli Sustainable Urban Mobility Plan** | Under Revision |
| **Sustainable Urban Transport for Trabzon city is starting with Trabzon Cycling Network** | Under Revision |
| **Düzce Province Bike Friendly Transport Network Operation** | Under Revision |
| **Kahramanmaraş Smart Bicycle Road** | Under Revision |
| **Liveable Kayseri for Disabled and Pedestrians** | Under Revision |
| **Use Public Transport Save Future Kırıkkale** | Under Revision |
| **Development of Accessible and Safe Transport Network in Rize** | Under Revision |
| **Development of cycle lanes in Konya and increasing their safety** | Rejected by the EUD |
| **Kilis Municipality Urban Transport** | Rejected by the EUD |

*Source: EUID SCM 2 Presentation.*

Among the 13 project proposals which have been reviewed, the "*EU support to İzmir sustainable mobility plan*" and the "*EU support for promoting sustainable urban mobility in Turkish cities*" have been approved. The budget allocated to these two projects is EUR 4.9 million. Ankara, Kocaeli and Trabzon also have SUMPs projects under revision and these cities seem to have the institutional capacity to actually implement them. Development of cycle lanes in Konya and increasing their safety and Kilis Municiplity Urban Transport Projects were rejected. The preparation of the SUMP projects of İzmir, Ankara and Trabzon is currently supported by the technical assistance "*Strengthening the Transport Operating Structure and ERAs in IPA II (2014-2020) Period*" and one more project can be prepared with the support of the World Bank. Therefore, with addition of 3 more SUMP projects the absorbed fund is estimated to reach approximately 13 million EUR. With the support of technical assistance, the used funds are estimated to reach approximately 15 million EUR. However, yet there are no other SUMP projects and with the support of the TA 4 project proposals are now expected to be complete. Target of 6 SUMP projects is to be maintained, however fulfilment of this target requires systematic efforts from the side of the TA and the ERAs

seems reasonable and would substantially contribute in decreasing the risk of de-commitment.

Kilis Municipality Urban Transport project has been rejected by EUD. Provinces of Kırıkkale, Kayseri, Düzce, Kahramanmaraş and Rize are under risk of having projects rejected mostly due to their lack of institutional capacity. In this respect some funds are expected to be de-committed. Therefore, the weaknesses of the ERAs need to be addressed by TA.

Action 4: Acquis Alignment and EU Integration

Under Action 4 *Acquis Alignment and EU Integration* the indicator regarding the alignment within the National Programme is:

| Indicator | Target |
|---|---|
| **STATUS OF THE IMPLEMENTATION OF THE NATIONAL PROGRAMME FOR THE ADOPTION OF THE ACQUIS.** (***Description*: Excluding ones to be enacted within the framework of full membership perspective.**) | 100% |

This indicator is certainly too ambitious as there are also other institutions under the Transport Section in the National Programme which are responsible of the execution for some of the interventions envisaged in the National Programme: such as the Ministry of Education, the Ministry of Industry and Technology, etc. Therefore, those indicators for which MoTI is not fully responsible should be omitted and the 100% target should be modified.

# 6. Conclusions and recommendations

This Midterm Evaluation provides an overall independent assessment of the MAAP-T achievements to date seen under the criteria of ***relevance***, ***efficiency***, ***effectiveness***, ***coherence***, ***EU value-added***, ***sustainability*** and ***coordination***.

## Relevance

MAAP-T is highly relevant for the needs of the Turkish transport sector for its target groups and to foster the alignment of Turkish transport sector to EU standards. Having Turkey, the 50% of its trade with EU, the transport networks with EU have a strategic and fundamental importance. The functioning of these networks is also crucial for EU as well as it is for Turkey, since the country is a strategic gateway to the eastern markets. Nevertheless, incomplete and missing routes, insufficient transport infrastructure remain as impediments for the development of these networks; first and foremost, the. railway connections is inadequate. In this context, modernization of the railway connecting Turkey with the EU planned under **Action 1** is highly relevant to further develop the EU TEN-T network. The modernization of Halkalı-Kapıkule railway has positive contribution in raising the share of both passenger and freight transport by rail and this tries to minimise the severe modal imbalance towards road transport in Turkey that leads to high levels of environmental pollution, dependence on fossil fuels, pressures on the road network, congestion, traffic accidents, etc.

In this respect, there are serious shortcomings in intermodal transport such as lack of integrated approach among institutions regarding inter-modal transport strategies, incomplete legal framework and insufficient institutional capacities, congestion based on population and urbanization necessitating a modal shift towards investments in rail and maritime transport. Activity 1.4 (*Promoting inter-modality and modal shift*) with the project aimed at "*Strengthening Intermodal transport services in Turkish Railway Sector*" intends to promote inter-modality and modal shift by supporting the implementation of Turkish Combined Transport Strategy. This can be obtained by means of financing a permanent combined transport platform and by supporting the preparatory studies and works for the infrastructure investments. Furthermore, the "*Construction of Çerkezköy Intermodal Terminal*" builds specific infrastructure in this framework.

The extreme weight of road transport in Turkey enhance the negative consequences of transport on environment and Turkey lacks of a strategy on reducing environmental impact of transport. Action 1.2 aims to support the preparation of the Turkey Low Carbon Sustainable Transport Development Strategy and Action Plan. The Activity also envisages the implementation of soft measures to help the reduction of Greenhouse Gas emissions, reducing the effects of noise pollution and preventing marine pollution.

Activity 1.3 (*Transport Safety*) addresses the problem of road traffic accidents and their high toll in terms of death and fatalities. The Activity basically focuses on enforcement of road traffic rules targeting transport operators, municipalities, the education system, infrastructures design requirement, citizens

and NGOs, also aiming to enhance the building of relevant capacities within the institutions in charge, such as: MoTI, The Turkish National Police and the General Command of Gendarmerie.

**Action 2** addresses the lack of adequate research and innovation on transport and intends to build capacity within Maritime Affairs and Communication Research Centre in MoTI. Under the same Action, MAAP-T supports the ITS strategy and other ITS measures addressing the lack of a strategy and of common standards and terminologies in ITS, reducing transport costs, congestion and the number of causalities in road accidents.

**Action 3** aims to address the overwhelming demand created on transport by excessive urbanization. The Action encourages municipalities to prepare SUMPs and raise the level of investments for a better access to public transport in cities.

Turkey, following its a clear rationale for integrating into the Single European Transport Area, has to work both for alignment and to follow these dynamic changes in the EU transport policy. In this respect **Action 4** addresses the still incomplete legal framework and the related institutional capacities in some sub-sectors by means of the provision of further trainings in EU integration, sub-sector policies and on environmental issues to relevant administrative officials.

MAAP-T is also well aligned with the transport policies in Turkey. The key policy objectives presented in the 11th Development Plan and articulated in the Transport and Communication - Target 2023 Action Plan are a) to foster the integration among the transport modes; b) to maintain quality of infrastructure; c) adopting an integrated approach in formulating spatial and transport plans; d) the establishment of a transport research and training centre and conducting research for alternative transport; e) the establishment of new corridors with the neighbouring countries; f) to raise the share of rail transport for both freight and passenger transport; g) to ensure safety in transport, minimizing the harm done on environment; H) to get maximum benefits from information technologies. All these key policy objectives are punctually reflected in the MAAP-T.

## Effectiveness

Activity 1.1 (*Modernization of the railways*) modernizes Turkish railway infrastructure with particular emphasis on connection with the EU TEN-T network. The backbone of this Activity is the Halkalı-Kapıkule railway line that strengthens the network with TEN-T connecting Turkey to Bulgaria.

Activity 1.2 (*Environmental and Climate Change related measures*) supports the identification, preparation and implementation of climate change related mitigation and adaptation policies in the transport sector. Therefore, it is expected to serve environmental sustainability and climate change-related mitigation with adaptation measures.

Activity 1.3 (*transport safety*) helps enforcement of road traffic rules and targets an extensive list of target groups such as transport operators, municipalities, the education system, infrastructures' design requirements, citizens, and Non-Governmental Organizations NGOs

Activity 1.4 (*Promoting inter-modality and modal shift*) supports the implementation of the "Turkish Combined Transport Strategy" by implementing soft measures, such as: the formulation of master plans for the improvement of logistic capacity and inter-modality and the establishment of a permanent combined transport platform for intermodal transport solutions.

Activity 2.1 (*Supporting mechanism of the implementation of the ITS Strategy and Action Plan*) supports the implementation of the ITS Strategy and Action Plan. Financial support is provided to related national investments and it is expected to support the adoption of ITS systems in the transport sector.

Activity 2.2 (*Supporting Research and Innovation in Transport*) supports research and innovation in transport, financing organisational development, staff capacity building and the elaboration of national policies and strategies for research in the transport sector.

Action 3.1 (*Accessible transport*) supports to policy development, capacity building and the preparation and implementation of concrete accessible transport investments which is likely to further develop accessibility of public transport.

Action 3.2 (*Urban Transport*) particularly supports the preparation SUMPs at provincial level. In most of the cases, these plans are prepared by Municipalities and the programming of this Activity is still to be fully completed with mature projects.

## Efficiency

As far as the use of funds is concerned, so far, the MAAP-T budget's share that has been allocated and contracted amounts to 71%, this share is entirely destined to the Kapıkule-Halkalı railway modernization project. The whole of this contracted amount relates to **Action 1**. Therefore, as far as contracted amount is concerned the achieved level of efficiency is highly satisfactory. This high concentration in the use of funds is thus owed to a single infrastructure which theoretically also facilitates the absorption of funds. However, as of October 2020, the disbursed amount of MAAP-T financial resources is limited to the 34.5% which may indicate that there are some problems in the implementation of this infrastructure project.

While the concentration in terms of budget eases the budget absorption, in terms of number of projects more efforts in terms of revising documents and getting approvals are necessary for a high number of projects. As far as the number of contracted projects is concerned, 61% of the projects in the pipeline are either under revision, under preparation or withdrawn which signal a shortcoming in the maturity of the projects. This result owes both to the lengthy revision of procedures and, partially, also to the Covid 19 pandemic leading to delays particularly in procurement stages.

The OS may opt for a grouping of these partially mature interventions under a smaller number of larger projects, facilitating in this way the revision procedures and still maintaining the MAAP-T objectives. The problem is more acute with reference to **Action 3** as there are only two projects approved out of 13 submitted. The source of this problem is the low quality of project documents prepared by the ERAs (mostly Municipalities). Accordingly, more cooperation is needed between EUID and ERAs. Lack of mature projects under urban transport indicate the need for technical assistance to municipalities on

project preparation. Such a technical assistance could also help gaining momentum in having mature projects. At this regard, the technical assistance deployed within the framework of **Action 5** that supports preparation of SUMPs for İzmir, Ankara and Trabzon could have started earlier providing assistance to ERAs at the project generation stage.

## Coherence

As it has been already examined, measures that prepare Turkey for the new EU policies in transport are embedded in the content of MAAP-T.

As far as the progress towards zero road-transport fatalities is concerned, under **Action 1** (*Sustainable and Safe Transport*) one of the intended aims is to achieve a safer, transport system. Halkalı-Kapıkule railway project which aims to connect Turkey to TEN-T rail network also contributes to modal shift towards railway transport. With reference to the multi modal transport Activity 1.4 (*Promoting inter-modality and modal shift*) appears to be very coherent as it contributes to the implementation of the Turkish Combined Transport Strategy by the establishment of Çerkezköy Intermodal Terminal infrastructure. Such contribution to inter-modality will be made in compliance to the modality shift plans undertaken in the EU. Activity 1.2 (*Environmental and Climate Change related measures*) contributes to many objectives related to both EU transport policy and transport related policies within the Green Deal. This may happen by developing legal framework and institutional capacities to integrate environment, climate change and energy efficiency objectives into national transport investment decisions as well as urban transport planning compliant to the EU de-carbonization policies.

Automated and connected multimodality can be reinforced to a great extent by intelligent transport systems under **Action 2** namely Activity 2.1 (*Supporting mechanism of the implementation of the ITS Strategy and Action Plan*)

**Action 3** and namely Activity 3.2 (*Urban Transport*) is expected to extensively support transport becoming less polluting in cities by encouraging the preparation of SUMPs by municipalities.

When it comes to the results' chain of MAAP-T, there are interactions and harmonies between Actions and within each Action.

In Activity 1.1 (*Modernization of the railways*) the main project (Halkalı-Kapıkule railway line) will directly affect Activity 1.3 and Activity 1.4 as it improves transport safety and inter-modality as well.

If the objectives under Activity 2.1 (*Supporting mechanism of the implementation of the ITS Strategy and Action Plan*) are fulfilled, the implementation of Activity 2.2 (*Supporting Research and Innovation in Transport*), Activity 3.2 (*Urban Transport*), Activity 4.2 (*Supporting Policy Dialogue and technical cooperation*) and Activity 5.2 (*Project pipeline development*) will sensibly benefit.

Activity 1.3 (*transport safety*) envisages to implement of the works of the Road Traffic Strategy and Action Plan. In this respect, Activity 1.4 (*Promoting inter-modality and modal shift*), whole Action 3 (*Accessible and inclusive transport*), whole Action 4 (*Acquis Alignment and EU integration*) and Activity 5.2 (*Project pipeline development*) will benefit from the results of this Activity.

Activity 1.4 (*Promoting inter-modality and modal shift*) will also support the whole Action 3 (*Accessible and inclusive transport*) and Activity 5.2. (*Project pipeline development*).

Activity 2.1 (*Supporting mechanism of the implementation of the ITS Strategy and Action Plan*) provides positive impact to the Activity 1.3 (*Transport Safety*), Activity 1.4 (*Promoting inter-modality and modal shift*), Action 3 (*Accessible and Inclusive Transport*) and Action 4 (*Acquis Alignment and EU Integration*). Transport related R&D activities will be supported under the Activity 2.2 (*Supporting Research and Innovation in transport*) and the implementation of the Activity will provide positive impact to the whole MAAP-T implementation.

Action 3 (*Accessible and Inclusive Transport*) provides positive and complementary effect to the Action 4 (*Acquis Alignment and EU Integration*).

Action 4 (*Acquis Alignment and EU Integration*) and Action 5 (*Technical assistance*) provide positive effect to the managing capacity of the MoTI and –more generally- to the whole process of EU integration of Turkey. These Actions are directly supportive to all the expected results of the MAAP-T.

## EU Value-Added

There are many issues justifying Turkey's need for EU support in achieving the EU transport policy objectives and particularly the Green Deal.

One of the most important areas where Turkey would need EU support is the establishment of logistic centres at both levels of infrastructure and institution building interventions.

Turkey also needs support for additional TEN-T lines in Central and Eastern Turkey, completing north south connections toward the Mediterranean. Railway connection between European and Asian networks through the Yavuz Sultan Selim Bridge and -in general- for the completion of the whole TEN-T network in Turkey is completed. However, estimations indicate costly investments in this framework exceeding 4 billion EUR. In this respect, EU support is likely to be insufficient and Turkey should also seek IFI loans for these investments. In this respect, Turkey needs EU support on providing guarantees and leverages for those costly investments to be supported by IFI loans.

Turkey still needs for a modal shift from the road transport towards railway and maritime transport; regional dynamics also require Turkey to improve intermodal transport. In this framework, EU support is still need for sea-rail operations, short sea shipping routes, port-rail inter-modality, rail freight corridors-land inter-modality and development of combined freight terminals.

Development of intelligent transport systems for reducing congestion, for effective traffic management, reducing pollution in urban areas will also need EU support in the medium term. Turkey targets the establishment of 23 logistic centres. Turkey is rated 43$^{rd}$ in the Logistic Performance Index and plans to be ranked 25$^{th}$ by 2023. The achievement of this goal would also need for EU financial assistance.

Taking into account the high tolls of casualties on road transport, policies aiming to reduce and control the level of road accidents, fatalities and injuries also would benefit of EU support.

## Sustainability

As it was already examined, Activity 1.2 (*Environment and Climate Change related measures*) supports the identification, preparation and implementation of climate change-related mitigation and adaptation policies in the transport sector.

No project has been submitted under this Activity to date.

The removal of this Activity from the MAAP-T concept has many negative consequences, particularly for alignment to EU transport policy and the Green Deal. Equally important are the negative impacts on EU Turkey relations on transport and free movement of goods.

The reasons for dropping the implementation of this Activity has been to leave the preparation of environmental related projects to MoEU, but this decision would not be effective as transport related environmental pollution and climate change impact is a separate and very well defined dimension and the share of transport emissions in GHG is high. There is indeed large space for operation to implement this Activity.

From the operational point of view, it may be needed from 12 to18 months to finalize and detail necessary interventions to be supported by this Activity.

One of the options for recuperating financial allocation to the implementation of Activity 1.2, can be shifting unprogrammed funds in Action 4 and Action 5 and also the prospective tender savings to Activity 1.2

To allow suitable inter-ministerial coordination between EUID and MoEU a specific technical assistance can be designed within this Activity. Alternatively, this technical assistance may be funded through a framework contract managed by the EUD.

## Coordination

It has been noted that coordination between the EUID Units and EUID and other related MoTI Directorates proved to be adequate. On the other hand, presence of many immature projects under Action 3 signals inadequacies in the interaction level of ERAs while there is positive cooperation and communication between EUID and ERA.

Despite organising regular joint meetings, the coordination with other OS (such as MoEU, for example) should improve. Possibly, such improvement can be already noted by joint efforts in project preparation under Action 1.2 (*Environment and Climate Change related measures*) on transport and climate change between EUID and MoEU.

Unwillingness and disinterest in preparing and submitting projects under Activity 1.3 (*transport safety*) has been noted from the side of Turkish National Police and General Command of Gendarmerie. The preparation of such a project was expected to strengthen the capacities of these two institutions.

Institutional capacity varies across different ERAs. While project preparation is the sole responsibility of the ERAs, EUID should consider more intense cooperation particularly with municipalities and the provision of more and clearer guidance to facilitate project generation among those ERAs having less institutional capacity.

## Reconstruction of the Intervention Logic

Circumstances related to time, shortages in institutional capacities and risk of de-commitment of funds necessitate some reconstructions in the intervention logic.

As mentioned above, no project has been developed under Activity 1.2 (*Environment and Climate Change related measures*). As the lack of a transport strategy on climate change has many adverse consequences regarding inter alia the compliance to the Green Deal, the limitations by EU on free movement of goods and transport activities, etc. this Activity should be developed and substantiated with projects and the related indicators should be maintained.

Also, under Activity 1.3 (Transport Safety) the project 'TA for the Capacity Building of KGM for the Road Infrastructure Safety Management in Turkey' has been submitted and approved. On the other hand no Project could be developed concentrating on capacity building at the MoTMC,the Turkish National Police and the General Command of Gendarmerie. Therefore, the related indicator (Traffic safety enforcement methods, procedures and training of Turkish National Police updated) targeting 250 police officers to be trained appears to be invalid and should be deleted.

Due to confidentiality related to OIS documents currently under revision, it was not possible to assess if projects submitted truly satisfied accessible transport under Action 3.1 (*accessible transport*).

This project is financed by the European Union and the Republic of Turkey.

# Annex 1: Institutions and people interviewed

| NAME | INSTITUTION | SECTION | POSITION |
|---|---|---|---|
| **Nedim Yeşil** | MoTI | Head of EUID | |
| **Burcu Özcan** | MoTI | Programming, Monitoring and Evaluation Unit | Head of Programming, Monitoring and Evaluation Unit |
| **Emre Akkaş** | MoTI | Programming, Monitoring and Evaluation Unit | Programming Expert |
| **Seda Istanbullu** | MoTI | Programming, Monitoring and Evaluation Unit | M&E Expert |
| **Bengi Sarısaltıkoğlu** | MoTI | Procurement Unit | Head of Procurement Unit |
| **Burcu Mazlum Kayhan** | MoTI | Contract Management Unit | Head of Contract Management Unit |
| **İsmail Abacı** | MoTI | Financial Management Unit | Head of Financial Management Unit |
| **Seher Demirel Kütükçü** | MoTI | Technical Assistance and Human Resources Unit | Head of Technical Assistance and Human Resources Unit |
| **Emine Nilay Küçükaydın** | MoTI | Quality Assurance Unit | Head of Quality Assurance Unit |
| **Göktuğ Kara** | European Union Delegation | | Sector Manager |
| **Murad Gurmeriç** | The World Bank | | Sector Coordinator |
| **Ruggero Tabossi** | Technical Assistance Team (ICE led consortium) | | Team Leader |

# Annex 2: List of reference documents

- Transport Sectoral Operational Programme -MoTI
- Commission Implementing Decision,11,12,2014, Adopting a multi-annual Action Programme for Turkey on Transport
- Commission Implementing Decision, 06,12,2017, amending Commission Implementing Decision C (2014) 9675 final of 11.12.2014 adopting a multi-annual Action Programme for Turkey on Transport
- Commission Implementing Decision, of 5.12.2018, amending Commission Implementing Decision C (2014) 9675 of 11.12.2014 adopting a multi-annual Action Programme for Turkey on Transport
- Directive 2008/96/EC of the European Parliament and of the Council, of 19 November 2008, on road in infrastructure safety management
- Proposal for a Directive of the European Parliament and of the Council, amending Directive 92/106/EEC on the establishment of common rules for certain types of combined transport of goods between Member States,
- The European Green Deal- Commission Communication, Brussels, 11.12.2019 COM (2019) 640 final
- European Green Deal Investment Plan - European Parliament
- European Commission Roadmap, Communication from the Commission on the EU Strategy for a Sustainable and Smart Mobility
- EU Support to Sustainable Urban Mobility Planning, Action Document IPA II Annual Programme 2019
- Transportation and Communication Action Plan-Target 2023, MoTI
- Intelligent Transport Systems (ITS) Application, Murat Dursun BARUT, Director of Intelligent Transport Systems Division, General Directorate of Highways Turkey (PowerPoint presentation)
- Strengthening the Transport Operating Structure and ERAs in IPA II (2014-2020) Period, Final Inception Report
- Draft 7th SMC (PowerPoint presentation)
- Recommendations from Technical Assistance to EUID 2016 – Final Report abstract
- Recommendations from Technical Assistance to EUID 2017– Final Report abstract
- Procurement Plan-List of MAAP-T Projects (internal working document)
- Organisation Charts EUID (internal working document)
- List of Personnel and their Duties (internal working document)
- Approved OIS Summary Information (internal working document)
- Operational Programme Financial Tables (internal working document)