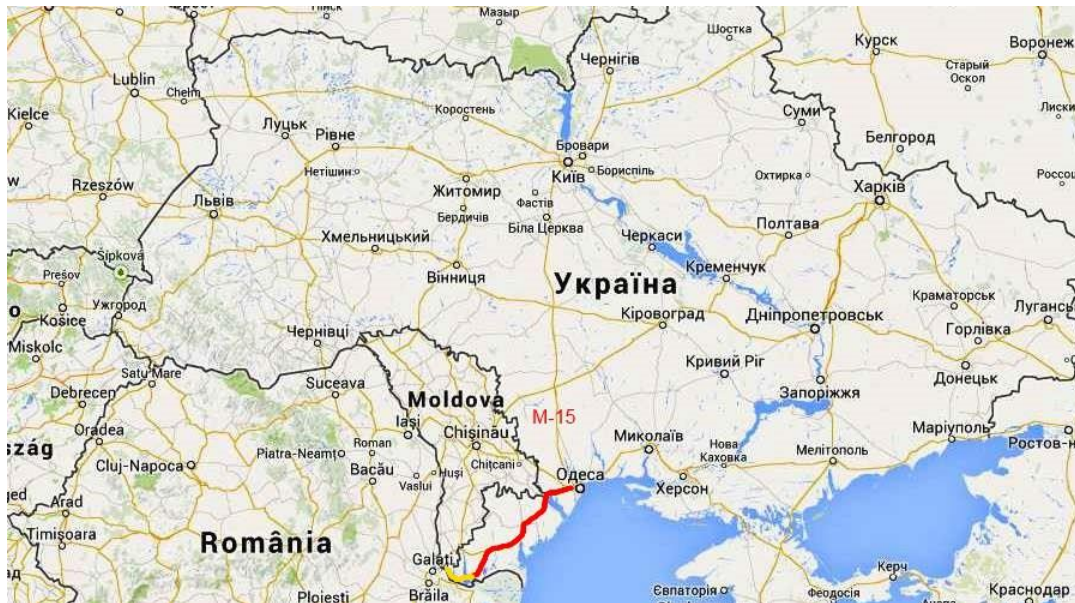


## Feasibility study of the construction of the highway Odessa-Reni

### General information

This project regards the **feasibility study of the construction of the highway Odessa-Reni** part of the Eastern Partnership strategic network (see Figure 9-1).

**Figure 9-1: Localisation of the highway Odessa-Reni (in red)**



Source: Ministry of Infrastructure of Ukraine (2017)

The construction of the Odessa-Reni highway could connect the Europe, the near East and the Middle East with Ukraine. Furthermore, being located in the Danube Macro-Region and in proximity to important Danube ports (e.g., Reni, Izmail, Ust-Dunaysk), it could lead to an overall increment in transport flows in this direction.

The Ukrainian Government gives priority to the realisation of this project as it is of **international relevance**. Indeed, the project is in line with the EU Action Plan for Urban Mobility, was included in the list of projects to be financed with private and public partnership schemes and is mentioned amongst the list of priority infrastructure projects on the Eastern Partnership regional transport network

The existing road is in poor conditions. Freight vehicles impair the road pavement. The road has only 2 lanes and, in some parts, it crosses urban areas, resulting in congestions. The road does not comply with the international standards of TEN-T network. Thus – according to the Ministry of Infrastructure of Ukraine and the Odessa Regional State Administration, the implementing bodies – a new road configuration would be needed and equipped with modern technologies.

### Technical description

According to the preliminary draft of the project prepared by Ukravtodor<sup>1</sup>, the total length of the road is 280 km. In general, transversal section of the highway will be in form of a four-lane (i.e., road category 1-a). The following activities must be conducted with the purpose of the feasibility study elaboration: (i) soil and hydrological analysis, (ii) geological feasibility study, (iii) hydraulic study, (iv)

<sup>1</sup> The national infrastructure manager.

infrastructure interferences analysis, (v) damage prevention for historical and archaeological places and (vi) study of potential areas of development (i.e., industrial, commercial, residential, tourist and logistics).

The construction works will include: (i) construction of the highway, (ii) construction of 2 bridges crossings (across the Dniester estuary (5,7 km), and the Danube river (4,3 km)), (iii) installation of tollhouses, (iv) placing of service houses, (v) installation of technological devices (such as telecom, video control, safety electronic systems, etc.) and (vi) ensuring electrical supply.

According to the consulted stakeholder, the latest figure of the **estimated investment cost** is equal to € 6 billion. The investment costs has been estimated relying on parametric unit values<sup>2</sup> and the high value obtained justified by the envisaged high-tech services and equipment. However, the Consultant deems that the methodology applied for the estimation is not appropriate.

### Project implementation

according to consulted stakeholder, only preliminary estimations have been carried out<sup>3</sup> on the timeline for project implementation. The construction works would last 5 years (i.e., from 01/01/2018 to 31/12/2022), starting start after the elaboration of the feasibility study and the preliminary design. The Table 9-1 summarises the expected plan of the activities.

**Table 9-1: Planning of activities of the highway Odessa-Reni**

Item	Period
Pre-feasibility phase (pre-feasibility studies)	4-6 weeks
Elaboration of feasibility study	6-8 months
Preliminary design phase (including tender for construction)	6-8 months
Construction works	5 years
Highway operation	since 2023

Source: Ministry of Infrastructure of Ukraine (2017)

### Transport demand

A detailed demand analysis and future forecasts are not available. According to some preliminary information provided by the consulted stakeholder, the expected traffic flow would be in the interval 18.000-23.000 vehicles/day, depending on summer or winter conditions.

### Financial analysis

The financial analysis is needed.

### Economic analysis

The economic analysis is needed.

### Environmental analysis

The environmental analysis is needed. According to the preliminary project design, the existing Odessa-Reni road **directly and indirectly influences the ecologic status of the region**. In the proximity

<sup>2</sup> The cost has been estimated relying on the cost/km of the Italian project “Passante di Mestre”, multiplied for the length of the Odessa-Reni road and adjusted with a coefficient which takes into account the lower costs of production factors in Ukraine compared with Italy (i.e., by -30% of the cost/km of the Passante di Mestre).

<sup>3</sup> The previous feasibility study was elaborated by Ukravtodor in 2008.

of residential areas, noise protection has to be provided with barriers and coverings around the highway, especially where the buildings are too close.

### **Safety levels**

The realisation of the project would improve safety levels, but a detailed quantification of the impact is needed. There is no other specific information related to safety levels and black spots on the concerned road section.