

SOUTHERN RING ROAD OF BUCHAREST (KM 52+770 - KM 100+765) + OPERATION AND MAINTENANCE OF BUCHAREST - PITESTI AND BUCHAREST - CONSTANTA MOTORWAYS

Concession Project Sheet –	
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1. PROJECT NAME

Southern Ring Road of Bucharest (km 52+770 - km 100+765) + operation and maintenance of Bucharest - Pitesti and Bucharest - Constanta motorways

2. ECONOMIC AND FINANCIAL INFORMATION

2.1 Internal rate of return (IRR) according to the Feasibility Study

9.8% (for the Southern Ring Road of Bucharest)

2.2. Project Costs

Lei 1.827 billion (EUR 523 million), VAT not included, according to technical and economic indicators of 2007 (exchange rate 1 Euro = Lei 3.4943, December 21, 2007). The amount represents design costs + construction costs for the Southern Ring Road of Bucharest. The following costs will be added to this amount:

Rehabilitation costs of Bucharest - Pitesti Motorway and other necessary equipment

+

Funding costs

+

Operation and maintenance costs

+

Reasonable profit for the concessionaire

3. DURATION OF CONCESSION AGREEMENT

30 years, of which:

- 2 years design + construction
- 28 years operation and maintenance

In establishing this duration, significant aspects were taken into account, such as: value of the investment, level of involvement of the private sector and period required to ensure adequate return on capital employed.

4. ESTIMATED IMPLEMENTATION PERIOD

2014 - 2044

5. STARTING DATE OF THE PROCEDURE

December 8, 2012

6. CURRENT STATUS OF THE PROJECT

Prequalification stage; the deadline for submitting applications: February 28, 2013

7. PROJECT BENEFICIARY

The Department for Infrastructure Projects and Foreign Investments in association with Compania Nationala de Autostrazi si Drumuri Nationale din Romania [Romanian National Company of Motorways and National Roads].

8. BRIEF DESCRIPTION OF THE PROJECT

The Ring Road of Bucharest is part of the Development strategy and the National Territory Planning Plan - Transport Networks, approved by Law no. 363/2006.

The motorway connects Bucharest - Pitesti A1 and Bucharest - Constanta A2 motorways, ensuring continuity of Pan-European Corridor IV, namely connecting the western part of the country to the east, facilitating access to / from western Romania and Europe to / from Constanta Port, the largest port of our country, domestic and international traffic of goods and passengers; also, the motorway will ensure direct, convenient and quick access to the resorts on the Black Sea coast.

The Ring Road of Bucharest is divided, according to the Feasibility study updated in 2007, in the following sectors:

- The Southern Ring Road of Bucharest;
- The Northern Ring Road of Bucharest.

Bucharest - Pitesti A1 and Bucharest - Constanta A2 Motorways are part of Pan-European Corridor IV and were previously built. They are now opened to traffic.

The concession agreement that the Public authority intends to conclude will cover the Southern Ring Road of Bucharest and A1 and A2 Motorways. The agreement will be concluded for these sectors.

A1 and A2 Motorways

Bucharest-Pitesti (A1) Motorway has a length of 96 km and was opened to traffic in 1972.

The A1 motorway route starts at km 10+600 on the outskirts of Bucharest and ends at km 120, near Pitesti. The route includes the so-called bypass road of Pitesti, built at motorway standard. The section between km 10+600 and km 106+500 was commissioned and opened to traffic in 1972 and, for the next 15 years, it was the only motorway in Romania. Bucharest-Pitesti section underwent major rehabilitation works and was reopened to traffic in early 2000. The bypass road of Pitesti was opened to traffic in November 2007.

The A2 motorway route starts at km 9+233, on the outskirts of Bucharest and ends at the intersection with the bypass road of Constanta, also built at motorway standard, more precisely at km 210. Bucharest – Fundulea – Lehliu – Drajna section was opened to traffic in 2004, while Drajna – Fetesti section was commissioned in 2007. Fetesti - Cernavoda section was built in 1987 and rehabilitated in 2008. Along the route there are two important bridges across the Danube (i.e. over Borcea branch of the Danube) and a toll booth station where the road tax is collected, equipped with barriers placed across the entire width, located near

Fetesti. Cernavoda - Medgidia and Medgidia - Constanta sections were opened to traffic in 2012.

The A2 motorway spans from Bucharest to Constanta, with a total length of about 204 km, starting in Bucharest and ending in the intersection with the bypass road of Constanta.

The roadway of both A1 and A2 motorways is standard for motorways, with standard features.

Existing ITS systems on the A1 and A2 motorways will be aligned with the system that will be used on the Southern Ring Road of Bucharest and completed with elements missing at this point.

Technical characteristics provided by the Feasibility Study for South Ring Road of Bucharest are:

The Southern Ring Road of Bucharest

• Length : 48 km;

• Carriageway : 2 x (2 x 3.75 m);

• Guide strips : 4 x 0.50 m;

• Emergency lanes : 2 x 2.50 m;

• Shoulders : 2 x 0.50 m;

• Spaces for parapets (outside the roadway) : 2 x 0.75 m;

• Central reserve (waterproofed) : 3.00 m;

• Bridges, overpasses and viaducts on the motorway : 36;

Road junctions
is 5 (of which only 3 junctions were assessed for indicators because connection junctions with A1 and A2 were included in the assessment of the northern ring road (2007))

• Design speed : 120 kph and 140 kph;

The motorway connects Bucharest - Pitesti A1 and Bucharest - Constanta A2 motorways, ensuring continuity of Pan-European Corridor IV, namely connecting the western part of the country to the east, facilitating access to / from western Romania and Europe to / from Constanta Port, the largest port of our country, domestic and international traffic of goods and passengers; also, the motorway will ensure direct, convenient and quick access to the resorts on the Black Sea coast.

Traffic forecasts

General

In the traffic study of the Southern Ring Road and A1 and A2 motorways, the traffic flows were estimated for the bypass road and the existing network of roads and motorways for a period of 35 years.

For this, a transport model was used, based on the results of the National Traffic Measurement carried out by CESTRIN in 2010 (origin-destination surveys and measurements in traffic on each section).

The study is based on a macroscopic traffic model performed using the VISUM software, produced by the German company PTV AG.

The traffic model used for this study was built starting from the national traffic model, developed in 2010, detailed and customized according to the project needs.

The model shows the traffic flows on A1, A2 and the Southern Ring Road, in the situation without road tax. The effect introducing road tax was considered in a second phase.

Current situation

Bucharest is a great traffic generator both due to its needs and social economic importance, and due to the presence of numerous logistic bases, offices, shopping centers and warehouses located along the existing ring road.

As a main conclusion, we can say that the existing Ring road serves Bucharest to a greater extent than the national road network. This also results from the initial studies and has the effect of overcrowding the transit traffic on national roads or motorways.

During the broadening works on the existing ring road in the north side, lower traffic values were recorded in this area and higher values in the south. This was due to the fact that drivers were avoiding the areas under construction by using the Southern Ring Road.

9. PRINCIPLES AND MAIN CHARACTERISTICS OF THE CONCESSION AGREEMENT

9.1. Stages for the award of the concession agreement:

After preselection, pre-selected candidates will go through the following steps:

- receipt of the award documentation based on which the dialogue is to take place;
- the performance of dialogue with the contracting authority;
- receipt of the final award documentation, resulting from the dialogue, based on which the final bids shall be submitted;
- submission of final bids;
- award of the winning bidder;
- potential final discussions on the concession agreement;
- signature of the concession agreement;

At the beginning of the dialogue stage, pre-selected candidates shall receive the draft of the concession agreement, as well as the technical documentation related to the Project. The concession agreement draft shall take into account the international practice in the field. At the same time, the provisions of the agreement shall comply with the provisions of Romanian law and shall be subject to dialogue. Also, the technical specifications shall be subject to dialogue.

9.2. Role of authorities

The road to be built shall be a public road, part of the national network of motorways. It will be subject to the same legislation to which roads in Romania are subject. The State shall have over it the authority conferred upon by the legislation into force in Romania.

Apart from these aspects, the motorway section covered by the concession agreement will not be part of the national road network managed by CNADNR, but its operation and maintenance will be provided by the concessionaire chosen based on this procedure.

The concessionaire will essentially have the same roles and responsibilities for the Southern Ring Road of Bucharest and Bucharest – Pitesti and Bucharest – Constanta motorways that CNADNR has for the national road network under its management. For the use of the Southern Ring Road of Bucharest and Bucharest – Pitesti and Bucharest – Constanta motorways, CNADNR will not charge a road tax, but the concessionaire will charge a concession fee, established according to the terms of the concession agreement.

9.3. Contractual obligations of the Project Company

The capacity of concessionaire shall be held by a commercial company with a special purpose (the Project Company) established by the winning individual bidder/consortium, with or without the participation of the Contracting Authority. Details regarding the legal structure for the performance of the project shall be established by the Contracting Authority further to the dialogue stage.

The Project Company established to implement the Project will have full responsibility for the Southern Ring Road of Bucharest and Bucharest – Pitesti and Bucharest – Constanta motorways for the entire concession period.

During the operation and maintenance period, the Project Company shall have clearly defined responsibilities regarding environment protection along the route, as well as the motorway safety and availability.

The Project Company will design, finance and build the motorway before the operation and maintenance period.

The agreement shall also include provisions related to the State's right to impose changes to the Project.

The Project Company shall meet the requirements for designer, contractor, constructor and beneficiary liability in what regards construction quality liability.

9.4. Payment mechanism

The contract shall provide the payment modalities to the Project Company. The Project Company shall be paid for the operation and maintenance period according to a payment mechanism and payments profile defined in the concession agreement.

9.4.1. Background

The payment mechanism governs the manner in which the Contracting Authority pays the concessionaire for the construction, operation and maintenance of the motorway. The principle is represented by a single annual payment in favour of the concessionaire, provided that such payment is strictly related to the performance of the concessionaire, determined based on pre-defined criteria. The mechanism needs to be designed so as to ensure the project's bankability and to represent an incentive for the Concessionaire, so that the latter meets the project objectives as set by the Contracting Authority.

In developing the payment mechanism it is essential to ensure that the transfer of risks to the concessionaire ensures the project remains bankable. The payment mechanism chosen in a concession agreement needs to be simple, clear, transparent, easily understandable to all parties involved in the achievement of the Concession Agreement objectives.

In designing a payment mechanism, it is important that both the concessionaire and the Contracting Authority fully understand the elements and formulas based on which payments are made, so as to obtain an optimum cost-benefits ratio, in the context of maximum efficiency in the provision of services for the entire duration of the Concession Agreement.

The payment mechanism is still in progress and shall be reviewed during the award procedure.

9.4.2. Payments structure

The payment mechanism shall rely o 2 individual elements:

<u>Availability payment</u>

The availability shall be defined in the terms of the technical requirements of the Contracting Authority for the Project and shall include, among others:

- compliance with the Contracting Authority's requirements regarding design and construction (e.g. geometry, design of suspended structures, etc.);
- compliance with the environment requirements;
- compliance with the traffic security requirements;
- availability of the motorway except during predetermined maintenance periods, based on predetermined adjustment periods depending on the reason and gravity of the lack of availability.

The availability payment is a measure of the road's availability for public transport. Such a measure shall reward the private sector for designing the road at high quality standards, which shall impose reduced maintenance operations, and to ensure that maintenance is scheduled so as to avoid traffic congestions, which result in increased travel times.

The availability payment is related to the performance standards included in the agreement. The payment mechanism in the case of a concession (availability payments) takes into consideration a number of key features as being optimum. Annual (or half-yearly) payments shall be made to the Concessionaire, in exchange of the services provided, in other words the availability of the motorway.

The concessionaire shall define in its concession offer the revenues required to cover all costs, therefore the concession shall be based on payments consisting in two cost components:

- Operation and maintenance costs and,
- Funding costs: debt service and return/profitability for the investors.

If the Concessionaire underperforms, penalty points shall be determined in relation to these payments, based on certain availability events, which are clearly defined and measured. These penalty points shall be defined in the following stage (the dialogue stage) and shall be deducted from gross payments.

The Contracting Authority will develop general performance measurement systems that will analyze the performance of the project company regarding the operation and maintenance of the motorway.

Regarding the revenues, the Concessionaire can collect revenues from <u>road tax</u> for the motorway, observing certain ceilings / margins set by contract. If revenues from direct taxation are insufficient to cover the construction and operation costs, the Contracting Authority shall allocate availability payments.

9.5. Allocation of risks

The Project complexity requires the rigorous assessment of all events which, over time, may influence one or several stages of the Project.

Any such event may trigger changes in the Project cost, time to completion, break even point of the investment.

The concession includes a correct identification and allocation of risks in relation to the project, between the public and the private sectors, so that value for money is created.

The allocation of risks shall be clearly defined in the concession agreement and shall be subject to dialogue.

The allocation of risks shall ensure that the Project meets the Government requirements for classification as "off-balance-sheet", together with the compliance analysis of EUROSTAT rules

The particularities of concession involve, as a basic principle, the liability of the private sector in all aspects regarding planning, design, construction, operation, maintenance, financing, market evolution, as well as any elements which have an influence over such aspects. Most risks shall be borne by the concessionaire.

The concessionaire shall have limited - or zero - liability for certain types of risks (e.g. unforeseen changes in the legislation affecting the roads industry specifically). This type of risk shall be allocated to the public sector.

9.6 Quality assurance

The Project Company shall be obliged to implement and comply with quality norms specific to motorways, including traffic safety, environment protection and health norms.

The state shall be entitled to inspect the compliance with quality standards. Any irregularity shall be correlated, according to a score, to withholdings from the availability payment due to the project company.

The road maintenance shall be performed based on performance criteria.

The Project Company shall be obliged to submit to the contracting authority all information necessary to assess the compliance with the quality requirements in the concession agreement.

9.7. Delivery conditions

At the end of the concession period, the motorway shall be delivered to the administration by the contracting authority. The Concession Agreement shall include detailed and clear procedures for delivery, as well as the technical parameters of the road at the time of delivery.

9.8. Disputes

The principles of concession require efficient and constructive cooperation between the public and the private sectors. For this purpose, the concession agreement shall include preventive or immediate disputes settlement provisions, which shall be in addition to the standard rules regarding disputes.

9.9. Break even point of the investment

A concession project involves private funding of the investment. The investment shall be recovered either directly, from taxes charged on end users or on the Contracting Authority, or through availability payments made in accordance with the compliance of performance criteria related to the quality of the services provided, or a mixed payment mechanism may be implemented, by combining the previous two.

The public authority acknowledges the bidder's right to recover its investment and obtain a reasonable profit from the services provided.

The actual modalities and duration of this process shall be included in the concession agreement. They include an assessment of potential sources of revenues and of the costs of the agreement.

9.10. Legal regime of the asset

The plots of land required to complete the Project, owned by individuals and/or legal entities, shall be expropriated (according to the legislation into force, currently consisting in Law no. 255/2010 and its implementation norms, approved by Government Resolution no. 53/2011) by care of the Contracting Authority and shall be delivered to the Project Company for the performance of construction works.

The motorway resulted from implementing the Project is public property, and the Project Company has concession right over it.

Upon termination of the concession agreement, the Project Company shall transfer the public asset, free of charge, to the public authority, in good and operating condition and free from any encumbrances or liens.

10. PARTICIPATION OF THE PUBLIC PARTNER IN THIS PROJECT

The public partner shall participate in the project with the land on which the motorway is to be built.

11. ESTIMATED PROJECT SCHEDULE

In December 2012, a award procedure was launched for the concession agreement for public works, according to GEO 34/2006 and Government Decision 71/2007. A brief estimate of the implementation schedule is related to the following milestones:

- Prequalification:
 - Submission of applications: February 28, 2013
 - Examination of applications + appointment of preselected applicants + legal period for any challenges: max. April 15, 2013
- Dialogue stage: maximum 4 months (August 15, 2013)
- Drafting the final award documentation: max. 15 days (August 30, 2013)
- Drafting and submission of final bids: 3 months (November 30, 2013)
- Examination of final bids + legal period for any challenges: January 31, 2014
- Fine tuning to the Concession Agreement + signing of the Concession Agreement: 15 days (February 15, 2014)