

BUCHAREST BRASOV MOTORWAY COMARNIC-BRASOV (CRISTIAN) SECTION

_	Concession Project Sheet –
5555	

1. PROJECT NAME

Bucharest – Brasov Motorway, Comarnic – Brasov (Cristian) section, km 110+600 – km 168+600

2. ECONOMIC AND FINANCIAL INFORMATION

2.1 Internal rate of return (IRR) according to the Feasibility Study (2004, updated in 2006)

15%

2.2. Project Costs

Lei 3.6 billion (EUR 797 million), VAT not included, according to technical and economic indicators of 2012 (exchange rate 1 Euro = Lei 4.5178, October 1, 2012). The amount represents design costs + construction costs for the Comarnic-Predeal and Predeal-Cristian sections + alignment. The following costs will be added to this amount:

Funding costs

+

Operation and maintenance costs

+

Reasonable profit for the concessionaire

3. DURATION OF CONCESSION AGREEMENT

30 years, of which:

- 4 years design + construction
- 26 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 08, 2012

6. CURRENT STATUS OF THE PROJECT

Pregualification stage; the deadline for submitting applications: 27.02.2013

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

COMARNIC - BRASOV SECTION:

Length: 58 km

Route: Comarnic - Brasov (Cristian) section has a general S-N orientation and

crosses Prahova and Brasov Counties, on the administrative territory of the following towns: Comarnic, Posada, Sinaia, Poiana Tapului, Busteni,

Azuga, Predeal, Paraul Rece, Risnov and Cristian

Section: Comarnic-Predeal

Comarnic-Predeal section is the third section of the Bucharest - Brasov Motorway, with a total length of 36.2 km. The main features of this section are:

•	Carriageway	2 x (2 x 3.50 m)
•	Guide strips	4 x 0.25 m
•	Emergency lanes	2 x 2.50 m
•	Earth shoulders	2 x 0.50 m
•	Parapet spaces	2 x 0.75 m
•	Central reserve (waterproofed)	2.50 m

Bridges, overpasses, viaducts 39Tunnels 18

Road junctions
 4 : Comarnic, Sinaia, Busteni, Predeal

Design speed
 120 kph and 80 kph

• Load class E (V80m A30)

The road between Comarnic and Predeal starts near Comarnic, at km 110+600 and follows the Prahova river bed up to 118+700 km. From km 118+700, the road separated from the river bed, crossing the western slope of the valley up to km 120+500.

Between km 120+500 and km 124+000, the motorway route lies on the right side of Prahova Valley. From km 124+000, it crosses the valley and remains on its left side to until km 132+000 where, again, it returns to the the river

bed until km 138+000, where the route crosses the river again and remains on the right side of the valley until km 146+000.

On the last section of the road, between km 146+000 and km 146+800, the route lies on the left side of Râşnoavei valley.

The average longitudinal gradient between Comarnic and Predeal is 1.4% and on some sections, of approximately 4 km in total, gradients are between 3% and 6%. Steeper slopes are relatively short in length and do not require additional curves for low speed vehicles.

Section 4: Predeal-Cristian

Predeal-Cristian section is the forth section of the Bucharest - Brasov Motorway, with a total length of 21.8 km. The main features of this section are:

Predeal-Râşnov

•	Carriageway	2 x (2 x 3.50 m)
•	Guide strips	4 x 0.25 m
•	Emergency lanes	2 x 2.50 m
•	Earth shoulders	2 x 0.50 m
•	Parapet spaces	2 x 0.75 m
•	Central reserve (waterproo	fed) 2.50 m

Râşnov-Cristian

•	Carriageway	2 x (2 x 3.75 m)
•	Guide strips	4 x 0.50 m
•	Emergency lanes	2 x 2.50 m
•	Earth shoulders	2 x 0.50 m
•	Parapet spaces	2 x 0.75 m
•	Central reserve (waterproofed	d) 3.00 m

Total route

•	Bridges, overpasses, viaducts	18
•	Road junctions	1: Rasnov
•	Design speed	120 kph and 80 kph

Traffic study

The traffic analysis took into account the traffic data collected after the traffic measurement carried out in 2010, organized by CESTRIN.

The traffic data were collected in 2010 on existing roads (DN 1, DN 1A, 73A DN DN 73). Traffic forecasts were developed for each sector of these roads, for the period 2010-2045, at 5 year intervals, considering a scenario with no motorways.

To develop the "motorway scenario", it was considered that the motorway, in case there is no road tax, will attract long-distance traffic, as opposed to local or short-distance traffic. For the purpose of the analysis, short-distance traffic was considered:

- for DN 1, the traffic up to a distance of about 20 km,
- for DN 1A, the traffic starting or ending in one of the towns located on DN 1A between Ploiesti and Brasov,
- for DN 73, the traffic between Moeciu and Brasov.

The analysis was performed based on origin - destination survey data collected in 2010 in the following four locations:

- DN 1 km 120+500 (close to the entrance in Sinaia from Comarnic),
- DN 1 km 138+800 (between Azuga and Predeal),
- DN 1A km 178+080 (close to the entrance in Sacele from Cheia),
- DN 73 km 121+830 (between Rasnov and Cristian).

The result of this analysis is presented in the following table, showing for each vehicle category the percentage of long distance traffic (as defined above):

Place	Motor- vehicles	Minibuses with max. 8 + 1 seats	Pick-up trucks and trucks with Maximum allowable weight <= 3.5t	Cargo trucks and derivations with 2 axes	Cargo trucks and derivations with 3 or 4 axes	Articulated vehicles (TIR) and towers with trailer, with more than 4 axes	Buses and coaches	Tractors with / without trailer and special vehicles	Cargo trucks with 2, 3 or 4 axes, with trailer
DN 1 km 120+500	76.17%	70.55%	70.70%	89.91%	87.10%	57.55%	95.00%	60.00%	80.00%
DN 1 km 138+800	77.95%	84.62%	77.00%	86.70%	86.57%	72.34%	95.18%	100.00%	90.00%
DN 1A km 178+080	21.12%	25.00%	75.00%	50.67%	56.52%	77.27%	89.20%	66.67%	66.67%
DN 73 km 121+830	18.47%	23.47%	9.88%	51.46%	37.25%	27.12%	72.22%	0.00%	25.00%

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, preselected 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 this concession agreement will not be part of the national road network managed by CNADNR, under the concession agreement concluded with the Ministry of Transports and Infrastructure, 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 Comarnic – Braşov motorway section that CNADNR has for the national road network under its management. For the use of Comarnic – Braşov motorway section, 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 future Comarnic – Braşov motorway 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:

Availability payment

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: 27.02.2013
 - Examination of applications + appointment of preselected applicants + legal period for any challenges: max. 15.04.2013
- 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: 31.01.2014
- Fine tuning to the Concession Agreement + signing of the Concession Agreement: 15 days (February 15, 2014)