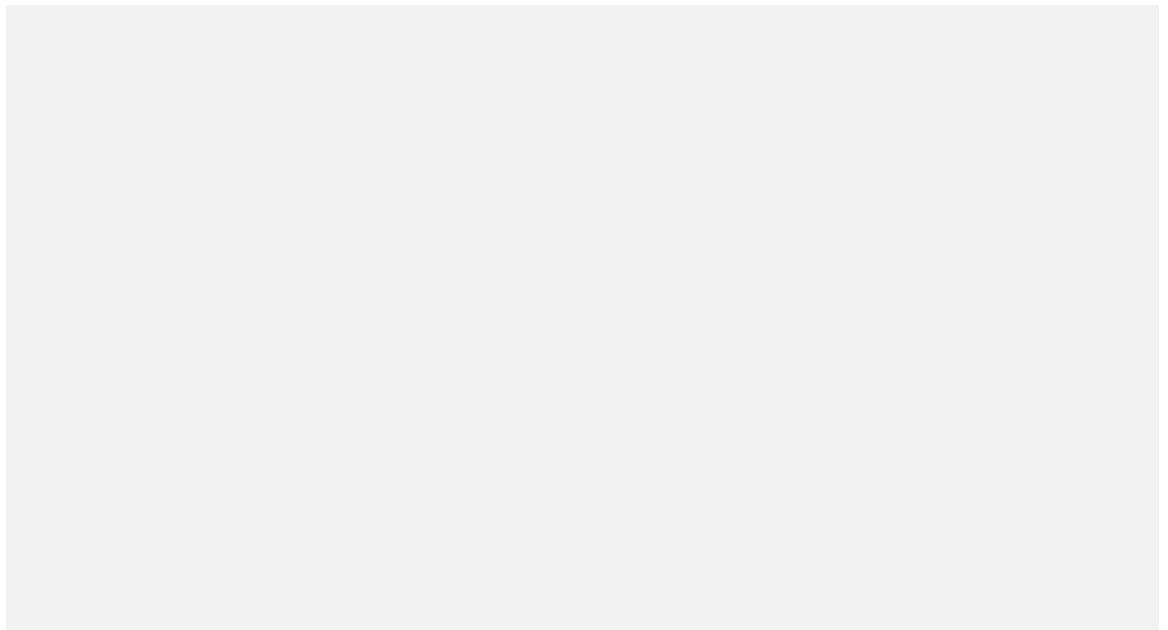




GOVERNMENT OF ROMANIA  
DEPARTMENT FOR INFRASTRUCTURE PROJECTS  
AND FOREIGN INVESTMENT

## **CRAIOVA - PITEȘTI MOTORWAY**

**– Concession Project Sheet –**



## **1. PROJECT NAME**

Craiova - Pitești Motorway

## **2. ECONOMIC AND FINANCIAL INFORMATION**

### **2.1 *Internal rate of return (IRR) according to the Feasibility Study 2008 (for express road)***

10.6%

### **2.2. *Project Costs***

Lei 2.714 billion (€ 747 million, exchange rate: 1 Euro =3.6323 Lei; February 13, 2008) (VAT not included) (according to the Feasibility Study 2008) (for express road). The amount represents construction costs and design costs. 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**

June 2013

## 6. CURRENT STATUS OF THE PROJECT

- Feasibility Study completed in 2008 (for express road)
- Technical and economic indicators approved by GD no. 236/05.03.2008 (for express road)
- The Feasibility Study is being updated (from Express road to Motorway)
- The Notice of intent for the Public works concession agreement for the design, construction, financing, operation and maintenance of Craiova - Pitești Motorway was issued on December 8, 2012.

## 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

- Length: 121km
- Artwork:
  - Bridges: 44, of which: 3 in Dolj County, 26 in Olt County and 15 in Argeș County
  - Viaducts: 12, of which: 3 in Dolj County, 6 in Olt County and 3 in Argeș County
  - Passes on the motorway: 18, of which: 3 in Dolj County, 13 in Olt County and 2 in Argeș County
  - Overpasses on the motorway: 28, of which: 4 in Dolj County, 15 in Olt County and 9 in Argeș County
  - Tunnels: 0
  - Road junctions: 10, of which: 2 in Dolj County, 6 in Olt County and 2 in Argeș County
- Cross-section type:
  - Carriageway 2 x 7.50 m
  - Guide strips 4 x 0.50 m
  - Emergency lanes 2 x 2.50 m
  - Shoulders 2 x 0.50 m
  - Central reserve 3.00 m
- Project description

### **Planned route**

#### **In Dolj County**

The motorway route begins (km 0 +000) from the North bypass of Craiova (National Road DN 65F km 4+000) where a road junction will be built.

After that, the motorway route overlaps with DC 4 over a length of approx. 1.00 km. Where the motorway separates from DC 4, a new road junction will be built.

After that, the motorway route heads east, passing north of Pielești, crosses road DC 1A, after which it will head south, crossing Railroad 101 Pitești - Craiova at km 16+200 and National Road (DN) 65 at km 16+640.

After that, the motorway lies south of National Road (DN) 65, until it reaches the border between Dolj and Olt Counties at km 17+700.

#### In Olt County

From km 17+700, the motorway route lies south of National Road (DN) 65, bypassing Balș.

At km 19+370 it was decided to build a road that will connect the express road and National Road (DN) 65 through a road junction.

At km 22+410 the express road crosses the Olteț river, and then continues parallel to Railroad 101 Pitești - Craiova, over a length of approx. 4 km, and overpasses it at km 26+235.

After that, the motorway lies between National Road (DN) 65 and Găneasa and Slătioara in the North and Railroad 101 Pitești - Craiova and Piatra Olt, Oltșoru and Criva de Sus in the South.

The express road overpasses Railroad 201 Piatra Olt - Râmnicu Vâlcea and National Road (DN) 64 at km 38+700 and km 39+020.

After that, the motorway route heads south of Slatina, crosses the Olt river at km 44+510, Railroad 101 Pitești - Craiova at km 48+710, road DJ 653 at km 52+200, Railroad 101 Pitești - Craiova at km 52+490, and then heads north and crosses National Road (DN) 65 at km 57+720, where a road junction will be built.

After that, the motorway route heads north of National Road (DN) 65, parallel to it, at approx. 500 m distance, over a length of approx. 10 km, and after that it crosses road DJ 703C at km 72+050, road DJ 703 at km 80+915, road DJ 657B at km 85+550, and then heads south, crossing National Road (DN) 65 at km 88+560, where a road junction will be built.

After that, the motorway will head south of National Road (DN) 65, until it reaches the border between Olt and Argeș Counties at km 89+300.

#### In Argeș County

From km 89+300, the express road heads south of Lunca Corbului, crossing road DJ 703B at km 93+925 and road DJ 679 at km 95+425.

The continuity of these roads is ensured by building overpasses.

At km 106+650, the express road overpasses National Road (DN) 65A and passes north of Bradu, overpassing railway 101 Pitești - Craiova at km 111+230, crossing road DJ 659A at km 111+865, road DJ 656 at km 113+730, road DC 111 at km 116+345, an industrial road at km 118+525 and then connects to A1 Bucharest-Pitești motorway at km 121+185.

The solution proposed in the final section of the motorway provides both a fluent transit traffic and a very good connection between Pitești and the express road.

The traffic coming from the central and east areas of Pitești will use the ring road and its junctions to access the express road - motorway.

The traffic from the west side will use the connecting road between National Road (DN) 65 and the express road to access the express road. Thus, transit traffic between Bucharest - Pitești - Craiova will no longer interfere with the traffic generated by the economic area

developed along National Road (DN) 65B. DN 65B will basically become an economic artery of Pitești.

### **Longitudinal section**

Considering that the motorway route crosses a relatively varied terrain, crossing various types of traffic routes, streams, canals, the longitudinal section was designed based on a complex set of criteria, among which:

- The motorway will have an embankment height of approx. 2.00 m, to ensure the proper drainage of the road structure;
- Making maximum use of the possibilities of extracting fill material from the areas where the terrain is more rugged and allows excavation;
- When crossing over traffic routes (roads, railways) the headroom will be ensured according to the regulations in force.

Thus:

- For intersections with roads, the headroom of 5.00 m was adopted
- Streams implies crossing them at the level set by the need to ensure topping the maximum water flow with 2%, as set by the NIMH (National Institute of Meteorology and Hydrology).
- The minimum alignment radius for vertical alignments
- The maximum allowable gradient of 5%, corresponding to the design speed of 120 kph
- Providing a longitudinal gradient of min. 0.30%.

To improve the level of comfort of road users on its entire length, vertical alignments will observe the following:

- The minimum radius for sag vertical curves is 5,600 m;
- The minimum radius for crest vertical curves is 12,000 m.

In terms of gradients the following apply:

<b>Gradients</b>	<b>% of the route</b>
0.30 – 1%	59
1.01 – 2%	13
2.01 – 3%	11
3.01 – 4%	13
4.01 – 5%	4

### **Road structure**

The road structure was calculated for the 11.5 tons axle, and the design traffic is assessed for a period of 15 years.

The calculation was made based on Romanian technical standards.

Slim, semi-rigid and rigid road structures have been studied.

Analyzing the three types of structures, it was concluded that, in terms of cost over the entire life of the structure and behavior over time, the most effective road structure is the semi-rigid structure.

The semi-rigid structure is the following:

- 4 cm of fiber stabilized asphalt concrete (asphalt mixture stabilized with cellulose fibers and polymer modified bitumen)
- 6 cm of open grade asphalt concrete (25 mm)
- 6 cm of bituminous coating AB 2
- 2 cm of asphalt mortar anticracking layer
- 25 cm of stabilized ballast
- 40 cm of ballast
- 20 cm of ballast subgrade layer

### **Water drainage works**

Drainage was solved according to the conditions offered by natural terrain, geometric elements of the longitudinal profile and considering the measures that need to be taken to ensure water pre-treatment prior to discharge into emissaries or the environment.

Drainage works consist mainly of the following:

- Lined ditches;
- Lined gullies and longitudinal drains in cut areas;
- Shoulder gullies and discharge side ditches to the embankment toe, in case of high embankments ( $H > 3.00$  m), in order to prevent direct flow of rain water on the embankment;
- Guard ditches in case the slope is towards the road.

Rainwater collected by ditches or gullies will be drained into existing emissaries (valleys, streams, rivers, etc.), channels, etc.

The types of works needed before discharge for the treatment of rainwater washing pollutants deposited on the carriageway are:

- Sedimentation tanks
- Oil separators

If there are no emissaries, rainwater will be discharged into the environment, by means of dispersion tanks.

In order to drain and evacuate water from the roads, the ballast layer shall be extended to the edge of the carriageway, in order to allow water infiltrated into the foundation to be discharged on slopes or in drainage systems along the motorway.

In order for water to pass under the motorway, 214 bridges will be built. The bridge clearance will be between 2.00 m and 5.00 m and will have facilities upstream and downstream.

### **Consolidation works**

Upon establishing the solutions for embankments consolidation, the following aspects were taken into account:

- ensuring the geometric elements of the carriage way;
- supporting the carriageway;
- consolidation of earthwork;
- improving the bearing capacity of the natural ground that needs to support high embankments;
- drainage of water from embankments, flanks and foundation soil.

For all types of embankments, retaining walls will be built where natural ground configuration in cross section leads to great lengths of slopes or where it is necessary to restrict the road territory.

The following consolidation works shall be carried out:

- Improvement of weak foundation soil:
  - Improvement of weak foundation soil on shallow and medium depths using mechanical procedures (compaction)
  - Depth improvement of weak foundation soils
  - Protection of earthworks against groundwater
- Consolidation works for backfills
  - Embankment retaining walls made of concrete
  - Embankment retaining walls made of reinforced soil
  - Reinforcement of embankments with geogrids or geocells
- Slope protection works
  - Slope protection with geocells
- Slope protection with geogrids

### **Hydraulic works**

The design assignment requested proposals for necessary hydraulic works.

According to STAS 4273/83 and STAS 4068/87, the works are classified as class III of importance and must be designed for normal drain flows, taking into account a 2% annual probability of overflow.

The following types of hydraulic works have been designed:

- Protection of embankment with concrete slabs
- Protection with retaining wall with elevation and concrete foundation
- Protection with gabion walls and mattresses
- Bottom sills made of gabions
- Buried bottom sills
- Adjustments and calibrations of riverbeds

### **Road junctions**

Connections between the motorway and the road network of the region that it's crossing shall be solved using a system of road junctions.

This system was designed taking into account:

- Main towns that need to be served;
- Regional road network characteristics;
- Traffic conditions that must be provided on the motorway.

After consulting with local authorities and the Planning Departments of Dolj, Olt and Argeş County Councils and examining the traffic study, it was concluded that the motorway must be connected to the existing road network as shown in the table below:

Item no.	Position	Connected road	Junction name
1	Km 0+000	DN 65F	Craiova Ring Road
2	Km 1+400	DC 4	Craiova West
3	Km 19+370	DN 65	Balş West
4	Km 27+630	DJ 644	Barza North
5	Km 35+685	DC 13	Piatra Olt N-W
6	Km 50+095	DJ 546	Slatina S-E

7	Km 57+720	DN 65	Valea Mare N-E
8	Km 74+700	DN 65	Negreni West
9	Km 108+480	DN 65A - DN65	Podu Broșteni
10	Km 121+185	A1	Cătanele

### **Bridges and overpasses**

Solutions for artwork (bridges, overpasses) were chosen in order to generally obtain lower total costs, including design, execution, maintenance and operation costs.

The constructive structure of the work will be done in compliance with the following principles:

- ensuring the functionality for which the structure was designed, for a safe and comfort operation, by choosing the overall dimensions correctly and according to the law, suitable protective equipment (safety parapets, pedestrian restraint systems, safety nets, etc.), drainage and evacuation systems for the water on the bridge, devices to cover joints tightly and comfortable, highly effective protection systems against infiltration of water, correct geometry and a perfectly plane and well dimensioned carriage way, which will ensure a comfortable traffic;
- ensuring the sustainability of the work by careful selection of building materials and constructive systems designed to eliminate the causes of premature degradation, as well as by anti-corrosion and decorative protection of surfaces exposed to aggressive agents (water, chloride ions, carbon dioxide, sulfates and freeze - thaw, high temperatures, etc.);
- ensuring low cost and a shorter execution period through correct calculation and careful selection of constructive systems, materials and execution technologies;
- ensuring the aesthetic aspect and harmonious integration into the environment through careful selection of dimensions and general shape of the structure and components (beams, piers, abutments) and by blending colors and shape with the surrounding landscape;
- ensuring a fast and correct execution pace by choosing clear constructive solutions and modern and efficient technologies;
- ensuring easy maintenance and operation by eliminating premature degradation from natural sources, by providing modern, effective, efficient and sustainable safety systems, by providing safe and easy access (access stairs, control platforms, maintenance trolleys for inspection and small scale interventions, etc.).

Headroom, total length and spans of artwork are fundamental elements for their constructive structure.

Dimensions for bridges and overpasses on CRAIOVA - PITEȘTI Motorway were adopted as follows:

- The cross section of bridges, viaducts and overpasses for express roads has 2 x 9.50 m on one lane, between the lateral bars of the platform, with a roadway of 12 meters on each carriageway, which is made up of a 0.50 m guide strip near the axis, two lanes of 3.75 m each and a 4.00m shoulder;
- when the obstacle crossed is a stream, bridge lengths and the red line level on bridges is determined by hydraulic calculations, based on flows provided by NIMH, observing the allowed clearance under the bridge;
- in case of other traffic routes passing over the motorway, the lengths and spans were set to ensure the alignment of the motorway cross section with a 26.00 m platform;



- the length of the pass and the red line level in case of passing over a railway were set according to the allowed headroom for railway trains, on economic efficiency grounds.
- Where the motorway crosses over national, county and communal roads, the headroom under the overpass will be at least 5.00 m.

### Construction details for superstructure

For spans between 10 m and 40 m, the solution adopted for the superstructure consists of precast reinforced concrete or prestressed concrete beams, with a concrete overlay on top. The type of prefabricated elements is  $\perp T$  or I, jointed.

For structures with multiple spans, the slab continuity was ensured using the 2 joints system and the continuity along the height of the structure was ensured through solid girders placed on intermediate piers. This will reduce the number of covering devices for expansion joints, with beneficial effects on the comfort and functionality of traffic.

For spans between 80 m and 120 m, in case of viaducts with great heights, the solution chosen will be made of prestressed concrete frames, with coffered cross sections, manufactured using the cantilever assembly technology.

Only for one pass over Railway 101, due to the great obliquity (about  $42^\circ$ ), the solution adopted was a mixed steel-concrete superstructure, with the cross section consisting of closed metal coffers, with a prestressed concrete slab on bearing areas, solution that can be executed by launch.

The coffer type section allows for a reduced building height and ensures a better torsional behavior.

### Construction details for infrastructure

The infrastructure of artwork consists of piers and abutments. Depending on the location and type of work (bridge, tunnel or viaduct), the abutment type chosen was massive, also called "heavy", made of plain concrete and reinforced concrete or buried, with elevation shaped as a reinforced concrete frame.

The piers shapes and structures vary depending on their efficiency analysis, on the nature and capacity of the foundation soil and their aspect and the overall aspect of the work.

The elevations of the piers are lamellar, with and without rods, usually used when the road is crossing streams, or frame-type with vertical columns with circular or polygonal section, for passes or viaducts, so that loads on foundations are as low as possible.

Depending on the geotechnical and geophysical conditions of each site, the foundation solutions adopted will be direct or indirect foundations on large diameter piers.

### Bearings, covering devices for expansion joints, parapets, etc..

Bearings are generally made of reinforced neoprene, and in case of bridges with great spans, they are metal or mixed (metal + neoprene + rayon).

The infrastructure shoulders are equipped with earthquake protection devices.

The number of expansion joints is reduced by the continuity of structures. Modern solutions will be adopted for covering devices, which will ensure tightness and allow easy maintenance and replacement, if necessary.

For the safety of road and pedestrian traffic, the road will be equipped with heavy and medium heavy safety parapets on the edge of the carriageway and pedestrian metal guardrails on the outer edge of the sidewalk.

In case of passes over the motorway and railways, safety panels will be mounted in crossing areas against falling objects or materials, near the parapets of these structures.

When the road passes near towns, the road will be equipped with sound barriers on the edges.

#### *Alignment with embankments*

The alignment of artwork with embankments is solved according to the type of abutments at the end of the structure: massive abutment or buried abutment.

Depending on the local conditions of each structure, solutions consisting of lined quarter cones or concrete wings were adopted, giving special consideration to water draining, functionality and blending with the environment.

For inspection and maintenance of artwork, the slopes of quarter cones quarters will provide access stairs to protection parapets.

To evacuate water from bridges, overpasses and viaducts, the heads are equipped with side ditches on slopes, ensuring discharge towards ditches located at the toe of the ramp or towards river beds.

Alignment of abutments with the ramps of the road system is obtained by alignment slabs made of reinforced concrete, with the length in accordance with the height of the embankment. Slabs will be placed at the appropriate level, so as to allow the complete execution of the road system from the ramps up to the abutment.

#### **Motorway facilities**

The motorway will be equipped with all the necessary elements to ensure a safe and fluent traffic.

#### *Traffic safety*

The motorway will be equipped with all safety systems specified by the regulations in force:

- parapet system
- horizontal markings
- vertical signals

#### *Service areas and parking lots*

The project will include

- 2 service areas, type PS1
- 3 short-term parking lots

#### *Maintenance and operating areas*

For maintenance and operation, the project will include:

- 1 maintenance and coordination center
- 2 maintenance and snow clearing bases

#### *Communication system*

The motorway is equipped with its own coordinated communication system from the Maintenance and Coordination Center. This system includes:

- The emergency call system
- The variable message system located in road junctions

The meteorological sensor system

## **9. PRINCIPLES AND MAIN CHARACTERISTICS OF THE CONCESSION AGREEMENT**

### ***9.1. Stages for the award of the concession agreement:***

- Preselection of candidates and establishing a shortlist
- 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 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 Craiova - Pitești motorway that CNADNR has for the national road network under its management. For the use of Craiova - Pitești motorway, 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 Craiova - Pitești 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 on 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 road tax 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**

A brief estimate of the implementation schedule is related to the following milestones:

- Substantiation Study for the concession decision: second quarter 2013
- Prequalification:
  - o Concession note second quarter 2013
  - o Submission of applications: trim. III 2013
  - o Examination of applications + appointment of preselected applicants + legal period for any challenges: thirist quarter 2014
- Dialogue stage: maximum 4 months (first quarter 2014)
- Drafting the final award documentation: max. 15 days (first quarter 2014)
- Drafting and submission of final bids: 3 months (second quarter 2014)
- Examination of final bids + legal period for any challenges: thirist quarter 2014
- Fine tuning to the Concession Agreement + signing of the Concession Agreement: 15 days (third quarter 2014)