MOBILITY AND TRANSPORT AUTHORITY

Regulation No. 910/2019, 28th november

Summary: Regulation of Economic Equilibrium in contracts for public railway transport services.

Preamble

Directive 2012/34/EU of the European Parliament and of the Council of 21 November 2012, which aims to establish a single railway area in the European Union (EU), version amended by Directive (EU) 2016/2370 of the European Parliament and of the Council of 14 December 2016, establishes the right of free access to the market of national passenger rail transport services.

While this represents an important milestone in completing the single rail area in the EU, it is necessary to bear in mind that the liberalisation of national passenger transport services, which includes the right to board and disembark passenger at any station located on the itinerary of a national or international service, including stations located in the same Member State, may have implications for the organisation and on the financing of rail passenger services provided under a public service contract.

Thus, in the context of market liberalisation, Member States have the prerogative to limit the right of access, whenever this could compromise the economic equilibrium of public service contracts, based on a reasoned decision by an independent regulatory entity.

Under the terms of paragraph 1 of article 11 of Decree-Law No. 217/2015, of 7 October, amended and republished by Decree-Law No. 124-A/2018, of 31 December, which proceeds to the transposition of Directive (EU) 2016/2370, of the European Parliament and of the Council, of 14 December 2016, the Mobility and Transport Authority [Autoridade da Mobilidade e dos Transportes] (AMT) is the competent entity for taking decisions regarding the limitation of the right of access and the right to board and disembark passenger.

The evaluation conducted by AMT, upon request by one or more interested parties, is based on the legal framework set out in Commission Implementing Regulation (EU) 2018/1795 of 20 November 2018, laying down the procedure and criteria for applying the economic equilibrium test pursuant to Article 11 of Directive 2012/34/EU of the European Parliament and of the Council.

According to subparagraph h) of paragraph 1 and subparagraph b) of paragraph 3, of article 5 of AMT's Statutes, approved by Decree-Law No. 78/2014, of 14 May, AMT's Board of Directors hereby approves the following Regulation of the Economic Equilibrium Test:

Article 1

Object

This Regulation establishes the procedures and criteria adopted by the Mobility and Transport Authority (AMT) to determine whether the economic equilibrium of a public rail transport service contract is likely to be compromised by the introduction of a new rail passenger transport service.

Article 2

Scope of application

This Regulation applies to new rail passenger transport services, whether national or international, between a specific place of departure and a specific destination, when one or more public

service contracts cover the same or an alternative itinerary, as provided for in Article 11, paragraph 1, of Decree-Law No. 217/2015 of 7 October, in its latest version.

Article 3

Definitions

For the purposes of this Regulation, the following definitions apply:

- (1) «Competent Authority», a competent transport authority in the meaning of Article 2, subparagraph b), of Regulation (EC) No. 1370/2007 of the European Parliament and of the Council of 23 October 2007, relating to public passenger transport services by rail and by road, in its current version:
- (2) "Applicant", a railway undertaking, an international grouping of railway companies or any other natural or legal persons, including the authorities referred to in Regulation (EC) No. 1370/2007, of the European Parliament and of the Council of 23 October 2007, relating to public passenger transport services by rail and by road, in its current version, maritime shippers, freight forwarders and combined transport operators, with a public service or commercial interest in acquiring infrastructure capacity;
- (3) «Public Service Contract», a public service contract, in the meaning of Article 2, subparagraph *i*), of Regulation (EC) No. 1370/2007 of the European Parliament and of the Council of 23 October 2007, relating to public passenger transport services by rail and by road, in its current version;
- (4) «Exclusive Right», a right as defined in Article 2, subparagraph *f*), of Regulation (EC) No. 1370/2007, concerning public passenger transport services by rail and by road, in its current version;
- (5) «Requesting Entity», any of the entities referred to in Article 11, paragraph 2, of Decree-Law No. 217/2015, of 7 October, in its latest version, which may request the AMT to conduct an economic equilibrium test;
- (6) «Net Financial Impact», the impact of a new rail passenger service on the net balance of costs and revenues arising from the fulfilment of public service obligations established in a public service contract, including a reasonable profit;
- (7) "Reasonable Profit", the remuneration of the capital invested in the provision of a service of general interest, net of any State contributions, which takes into account the degree of risk inherent in the provision by the undertaking (1);
- (8) «New Rail Passenger Transport Service», a rail passenger transport service conceived to operate as a regular timetabled service, which is either entirely new or implies a substantial modification of an existing rail passenger transport service, in particular in terms of increased service frequency or the number of stops, and which is not provided under a public service contract.
- (9) «Economic Equilibrium Test», evaluation process carried out by the AMT, on request by one of the requesting entities referred to in Article 11, paragraph 2, of Decree-Law No. 217/2015, of 7 October, in its latest version, in order to determine whether the introduction of a proposed new rail passenger transport service compromises the economic equilibrium of a public service contract that is currently in effect or under the award procedure.

Notification of the planned new rail passenger transport service

- 1 The applicant must notify the infrastructure manager and AMT of its intention to exploit a new railway passenger transport service at least 18 months before the entry into force of the service timetable to which the request for capacity refers.
- 2 The notification must be made and submitted by the applicant through the form available on the AMT Website (²) with the information identified in Annex I.
- 3 AMT shall publish on its website the model of the complete notification form submitted by the applicant, as referred to in the previous paragraph, and informs, within a maximum of ten (10) days from the reception of said complete form, the following entities:
- (a) Any competent authority that has awarded a public service contract for a rail passenger transport service on that same or an alternative route, within the meaning of Decree-Law No. 217/2015 of 7 October, in its latest version;
- (b) Any other competent authority with the right to limit access under the terms of Article 11 of the Decree-Law referred to in the previous subparagraph;
- (c) Any railway undertaking operating services under the scope of a public service contract on the route of the new railway passenger transport service or on an alternative route.

Article 5

Deadline for requesting the economic equilibrium test

- 1 All requests for economic equilibrium tests must be submitted to AMT by the requesting entities, within thirty (30) days from the date of the reception of the information referred to in paragraph 3 of article 4 of the present Regulation.
- 2 If, at the time of reception of the applicant notification as referred to in Article 4, a public contract procedure is under way for the award of a public service contract covering the same or an alternative route and the deadline for the submission of proposals to the competent authority has expired, an economic equilibrium test may be requested within the deadline referred to in paragraph 1 by the requesting entities, in respect of the future public service contract, which shall not exclude the application of the present Regulation to public service contracts in execution.
- 3 In the event that an economic equilibrium test is not requested within the period referred to in paragraph 1, the AMT, after the expiry of this period, informs the applicant and the infrastructure manager, within 10 (ten) days, and the latter must process the access request in accordance with the provisions of section 3 of chapter IV of Decree-Law No. 217/2015, of 7 October, in its latest version.

Article 6

Public service contracts with exclusive rights

If a competent authority has granted exclusive rights to a railway undertaking performing a public service contract in accordance with Regulation (EC) No. 1370/2007 of the European Parliament and of the Council of 23 October 2007, relating to public passenger transport services by rail and by road, in its current version, the existence of such rights shall not preclude the granting of access to an applicant seeking to operate a new rail passenger transport service, as long as the access does not compromise the economic equilibrium of the public service contract, the value of such exclusive rights being considered in the economic equilibrium test provided for in this Regulation.

Information required for the economic equilibrium test

- 1 The requesting entity must provide the following information for the purposes of carrying out the economic equilibrium test:
 - (a) Name, address, legal status and registration number (if applicable) of the requesting entity;
- (b) Contact details of the person responsible for the provision of clarifications (name, email address and telephone number);
- (c) Proof that the economic equilibrium of the contract may be compromised by the new railway passenger transport service:
- (d) Copy of the public service contract, if the requesting entity is a competent authority or the railway undertaking performing the public service contract, along with additional documentation to support the proof referred to in (c).
 - 2 AMT may request additional information, including, depending on the case:
 - (a) From the competent authority:
 - i) Traffic forecasts, including demand and revenue projections, along with the methodology used;
- *ii)* If applicable, the methodology and data used for calculating the net financial impact in accordance with Article 6, paragraph 1, of Regulation (EC) No. 1370/2007 of the European Parliament and of the Council of 23 October 2007, concerning public passenger transport services by rail and by road of passenger, in its current version, and the respective Annex.
 - (b) From the railway undertaking performing the public service contract:
- *i)* Copy of the public service contract, if not already provided under subparagraph d) of paragraph 1;
 - ii) The business plan for the route covered by the public service contract or an alternative route;
 - iii) Traffic forecasts, including demand and revenue, along with the methodology used;
- *iv*) Information on revenues and profit margins on the route covered by the public service contract or an alternative route;
- v) Information regarding service timetables, including departure times, intermediate stops, arrival times and connections;
 - vi) Estimated elasticities of services, for instance, price elasticity;
- *vii*) Capital and operating costs of the services provided under the public service contract, including variations of costs and demand induced by the new rail passenger transport service;
- *viii)* Weighted Average Cost of Capital (WACC) and Internal Rate of Return (IRR) underlying the financing conditions arising from the public service contract in execution.
- (c) From the applicant, information about its plans for the exploitation of the new railway passenger transport service, including:
 - i) Business plan;
 - ii) Passenger traffic and revenue forecasts, including the forecasting methodology;
 - iii) Pricing strategies;
 - iv) Methods of transport ticket sales:
 - v) Rolling stock specifications (e.g. load factor, number of seats, vehicle configuration);
 - vi) Marketing strategy.

- (d) From the infrastructure manager:
- *i)* Information about relevant lines or sections, in order to ensure the new rail passenger service can operate on the infrastructure;
- *ii)* Information about potential impacts of the new rail passenger transport service proposed on the performance and resilience of the infrastructure;
 - iii) Assessment of impacts on capacity usage;
- *iv)* Infrastructure development plans (if any) regarding routes covered by the new railway passenger transport service proposed, including timelines for implementation;
- *v)* Information on relevant framework agreements concluded or under discussion, particularly with the undertaking performing the public service contract.
- 3 All information referred to in paragraphs 1 and 2 must be submitted to AMT in electronic format. In duly justified cases, and with AMT's approval, documents may be submitted in paper.
- 4 The provision of false or inaccurate information constitutes a punishable infraction under the terms of Article 40 of the AMT Statutes.

Confidentiality

- 1 The information of a commercially sensitive nature received from the parties and related to the economic equilibrium test shall not disclosed by AMT.
- 2 The entity requesting the economic equilibrium test and the applicant must justify the non-disclosure of information of a commercially sensitive nature at the time of its submission to AMT, and such information may include, in particular, technical or financial details regarding an undertaking's know-how, about its business plans, cost structures, marketing and pricing strategies, supply sources and market shares.
- 3 AMT removes all commercially sensitive information from its decision before the respective notification and publication in accordance with Article 11, paragraph 4.
- 4 The information contained in the notification form specified in Article 4, paragraph 2, shall not be considered to be of a commercially sensitive nature.
- 5 If AMT considers that the grounds for the non-disclosure provided under paragraph 2 cannot be accepted, this decision will be communicated and justified in writing to the party requesting the confidentiality, no later than ten (10) days before the adoption of the decision referred to in Article 11, paragraph 1.
- 6 AMT's decision in matters of confidentiality may be subject to judicial review in accordance with Article 56, paragraph 17, of Decree-Law No. 217/2015 of 7 October, in its latest version, and no contentious information will be disclosed until a judicial decision on confidentiality is rendered.

Article 9

Applicable procedure to the economic equilibrium test

1 — AMT may request the entity requesting the economic equilibrium test to provide any additional information deemed necessary under the provisions of Article 7, paragraph 2, within thirty (30) days of receiving the request, and the requesting entity must provide this information within ten (10) days, in addition, AMT may request additional information if it considers the additional information insufficient.

- 2 If, thirty (30) days before the final deadline for receiving capacity requests as per point 3 of Annex VII of Decree-Law No. 217/2015, of 7 October, in its latest version, the information provided by the requesting entity is still incomplete, AMT will conduct the test based on the available information. If this information is insufficient for the test, the request may be rejected.
- 3 Within thirty (30) days after the request to carry out the economic equilibrium test, AMT will also request from the other parties referred to in Article 7, paragraph 2, the information necessary to carry out the test, in accordance with that provision, to the extent that such information can reasonably be provided by the party concerned, and AMT may, whenever the information thus provided is incomplete, request additional clarification, setting a time limit of ten (10) days for this purpose.
- 4 If thirty (30) days before the deadline for receiving capacity requests set in accordance with point 3 of Annex VII of Decree-Law No. 217/2015 of 7 October, in its latest version, the information provided by the applicant requiring the access is still incomplete, AMT will carry out the test on the basis of the information available. If, however, AMT considers that the information provided by the applicant is insufficient to carry out the test, it may issue a decision resulting in the rejection of access.
- 5 If the undertaking that executes the public service contract is not the requesting entity, and in the eventuality that thirty (30) days before the final date for receiving the capacity requests, in accordance with point 3 of Annex VII of Decree-Law No. 217/2015, of 7 October, in its latest version, the information provided by this undertaking is still incomplete, AMT will conduct the test based on the available information. If, however, the AMT considers the provided information insufficient to carry out the test, it may issue a decision resulting in the rejection of access.
- 6 AMT adopts a decision within thirty (30) days following the reception of all the relevant information and, in any case, before the deadline for receiving capacity requests, established in accordance with point 3 of Annex VII of Decree-Law No. 217/2015, of 7th October, in its latest version, immediately informing the infrastructure manager of its decision.
- 7 Whenever an economic equilibrium test is required in accordance with Article 5, paragraph 2, in respect of a public service contract for which the award procedure is in progress, AMT may suspend the analysis of the request for a new railway passenger transport service for a maximum period of 12 months from the date of reception of the notification by the applicant of that new service or until the completion of the tender procedure, whichever on which occurs first.

Content of the economic equilibrium test and evaluation criteria

- 1 It is AMT's competence to assess if the economic equilibrium of a public service contract is compromised by the new railway passenger transport service proposed, taking as a reference the methodology set out in Annex II to the present Regulation, which is published on AMT's Website.
- 2 It is considered that the economic equilibrium is compromised whenever the new railway passenger service or the new international service has a substantial negative impact, in accordance with the methodology contained in Annex II to the present Regulation, on at least one of the following elements:
- (a) Profitability of the services provided by the railway undertaking under the scope of the public service contract;
 - (b) Net cost to the competent authority which awards the public service contract.

Result of the economic equilibrium test

- 1 In the light of the result of the economic equilibrium test carried out in accordance with Article 10, AMT takes a decision provided for in Article 11, paragraph 1, of Decree-Law No. 217/2015 of 7 October, in its latest version, on the basis of which the right of access to the railway infrastructure is granted, amended, conditionally granted or refused.
- 2 If the economic equilibrium of a public service contract is compromised by the new railway passenger transport service, AMT:
- (a) Will suggest, as appropriate, possible changes to this new train passenger transport service, such as modifications to frequencies, time slots, intermediate stops, or timetables, that would ensure compliance with the conditions for granting the right of access as stipulated in Article 11, paragraph 1, of Decree-Law No. 217/2015 of 7 October, in its latest version; and/or
- (b) Will provide recommendations, if relevant in light of the net benefits for passenger, to the competent authority referred to in Article 11, paragraph 2, subparagraph a) of Decree-Law No. 217/2015 of 7 October, in its latest version, regarding other changes not related to the new passenger' transport service, which would ensure that the conditions for granting the right of access are met.
- 3 In the circumstances described in Article 5, paragraph 2, AMT may grant access for a limited period of time, pending the result of the economic equilibrium test to be carried out in accordance with Article 5, paragraph 2, and Article 9, paragraph 7.
- 4 AMT will notify a non-confidential version of its decision to the entities listed in Article 11, paragraph 5, of Decree-Law No. 217/2015 of 7 October in its latest version, and will publish it on its website.

Article 12

Cooperation between competent regulatory entities with a view to a proposed new international passenger transport service

- 1 Upon receiving a notification from the applicant of its intention to start a new international passenger transport service, AMT, within ten (10) working days from the reception of the notification, informs the other regulatory entities of the Member States involved in the route of the proposed new service.
- 2 After receiving a request for an economic equilibrium test from a requesting entity, AMT informs the competent regulatory entities referred to in the previous point about it.
- 3 During the exchange of information relating to the tests, AMT is subject to the principle of confidentiality of information of a commercially sensitive nature received from the parties involved.

Article 13

Entry into force and application

- 1 The present Regulation enters into force on the date of its publication.
- 2 The present Regulation applies to notifications referred to in Article 4, received after 1 January 2019, and for.
- 3 For notifications relating to Article 4, received after 1 January 2019, and for services starting before 12 December 2020, the provisions of the Execution Regulation (EU) No. 869/2014 shall apply.

ANNEX I

Formulário para Notificação da Programação de um Novo Serviço de Transporte Ferroviário de Passageiros

(Form for the notification of a planned new rail passenger service)

1. Dados	do candidato	
(Applic Nome da em (Applicant na		
Natureza Jui (Legal entity)	rídica:	NIPC: (Registration Number)
Endereço: (Address)		·
prestação de	onsável pela e esclarecimentos: consible for queries)	mail:
	a e Certificados de Segurança ce and Safety Certificates)	
Licença emi (Licence issu		
Sim (Yes)	Nº de identificação UE: (EU identification number)	
Não (No)	Indicação da fase atual do p (Indication of the stage of the	rocesso de licenciamento: e procedure to obtain the license)
	de Segurança "Parte A" emitid icate "Part A" issued)	0:
Sim (Yes)	Nº de identificação UE: (EU identification number)	
Não [Indicação da fase atual do p (Indication of the stage of the	rocesso de certificação: e procedure to obtain the certificate)
	de Segurança "Parte B" emitid icate "Part B" issued)	o:
Sim (Yes)	Nº de identificação UE: (EU identification number)	
Não (No)	Indicação da fase atual do p	rocesso de certificação: e procedure to obtain the certificate)

3. Itinerário(s) (Route(s))

_								
	Data prevista de início de exploração:///							
Período mínimo previsto de exploração do serviço: anos (Planned minimum period of operation (years))								
	Horário: (Timetable)							
	Paragem (Stop)	Hora partida (Departure time)	Tempo paragem comercial (Commercial stopping time)	Tempo paragem técnica (Technical stopping time)	Enlaces (Connections)	Observações (Remarks)		
	Estação Origem (Departure Station)							
	Paragem intermédia (1) (Intermediate stop (1))							
	Paragem intermédia(n) (Intermediate stop(n))							
	Estação Destino (Arrival Station)							
Frequência: (Frequency) Tipo de velocidade: (Maximum operating speed)								
	Lugares ofere (Seats offered)		Normal: _ (Standard)		Máximo: (Max)			
	Desvios ao horário normal em termos de frequências: (Deviations in frequency from the standard timetable)							
	Desvios ao horário normal em termos de paragens: (Deviations in stops from the standard timetable)							

Material circulante (Rolling stock)

Locomotivas: Diesel Quantidade: Elétrica Quantidade: (Locos) (Quantity) (Electric) (Quantity) Automotoras: Diesel Quantidade: Elétrica Quantidade: (Quantity) (Electric) (Quantity) Carruagens: Quantidade: (Quantity) (Quantity)						
Informações indicativas do material circulante a utilizar em cada itinerário, no meadamente: (Indicative information on the rolling stock the applicant plans to use in each route, namely) - Proprietário; (Owner) - Velocidade máxima; (Maximum speed)						
- Série e nº de unidades da série; (Class and number of vehicles per class) - Fabricante; (Manufacturer) - Ano de fabrico; (Manufacturing year) - Potência; (Power)	- Peso; (Weight) - Lotação; (Seating Capacity) - Curvas de tração e frenagem; (Tractive effort and braking curves) - Entidade responsável pela manutenção. (Entity in charge for maintenance)					

Notas: (Notes)

As informações relativas à exploração prevista reportam-se, no mínimo, aos primeiros três anos, devendo se possível abranger um período não inferior a cinco anos.

(The information regarding the planned operation shall cover at least the first three years and, as far as possible, not less than five years of operation)

Devem ser anexados em formato eletrônico os documentos comprovativos das informações prestadas nas diversas secções do presente formulário.

(The documents supporting the information provided in the sections of this form shall be attached, in electronic form)

As informações prestadas no âmbito do presente formulário não são consideradas pela AMT de natureza comercialmente sensível.

(Information included in this standard notification form is not considered by AMT as commercially sensitive)

ANNEX II

Methodology

(referred to in paragraph 2 of Article 10)

I — Methodological note

1 — AMT's methodology for drawing up the economic equilibrium test is based on the principles outlined in the Execution Regulation (EU) 2018/1795 of 20 November 2018, and Decree-Law No. 217/2015, of 7 October, as amended by Decree-Law No. 124-A/2018, of 31 December, which

transposes Directive (EU) 2016/2370 of the European Parliament and of the Council of 14 December 2016 amending the Directive 2012/34/EU of 21 November 2012, regarding the opening of the national railway passenger transport market, as well as best practices of the European Commission and the European Investment Bank regarding Cost-Benefit Analysis applicable to major transport infrastructures investment projects.

- 2 With the necessary adaptations to the National Railway Ecosystem, this methodology aims to asses: *i*) the economic profitability of new railway service; *ii*) the impact of the new railway service on the economic equilibrium of the public service contract; *iii*) the social benefits/losses generated by the new railway services; and *iv*) the impact on financial compensation provided by transport authorities in the scope of the public service contract(s).
- 3 Apart from the economic and social analysis, it is important to evaluate the eventual contribution of the new railway services to improving the performance of the National Railway Network (RFN), namely the optimisation of the capacity and consequently the reduction of the costs of the use of the infrastructure and the connection with other modes of transport. Likewise, it will also take into account the constraints that may arise from the new services on the punctuality and continuity of railway services subject to public service obligations.
- 4 On the other hand, it should be mentioned that AMT's evaluation on the impact of new services on the overall performance of the RFN is based on a case-by-case and purely qualitative approach, taking into account, in particular, the investments in the RFN, enshrined in the National Investment Programme 2030 [Programa Nacional de Investimentos 2030] (PNI 2030) and/or in other investment plans or programmes.

II — Object and scope of evaluation

- 1 AMT evaluates the net financial impact of a new railway passenger service on a public service contract, analysing the impacts on costs and revenues generated by the services covered by the public service contract, as a result of the new railway passenger service, namely:
- a) The variation in costs incurred and revenues obtained by the railway undertaking that executes the public service contract (including any eventual cost savings, such as those resulting from not replacing rolling stock reaching the end of its useful life or terminating employees contract);
- *b)* The potential financial impacts on the network covered by the public service contract as a result of the exploitation of the new railway passenger service proposed, such as, for example, transporting passenger who might be interested in a connection with a regional service covered by the public service contract:
- c) Possible competitive reactions on the part of the railway undertaking that executes the public service contract;
- d) Impact on certain investments by railway companies or competent authorities, for example in rolling stock; and
 - e) Value of any existing exclusive rights.
- 2 AMT's analysis considers the public service contract as a whole and not the individual services provided under it, during its entire duration.
- 3 AMT assesses the importance of the impact taking into account, in particular, the contractual provisions in force between the competent authority and the railway undertaking that executes the public service contract, including, where applicable, the amount of compensation for the public service obligation fixed in accordance with the Annex of the Regulation (EC) No. 1370/2007 of the European Parliament and of the Council of 23 October 2007, relating to public passenger transport services by rail and road, in its current version, or resulting from a competitive award procedure and any risk-sharing mechanisms, such as traffic and revenue risks.

- 4 Additionally, AMT evaluates the net benefits for passenger and the wider social benefits, namely:
- a) The net benefits for consumers arising from the new railway passenger transport service in a short and medium term;
- b) The impact of the new railway passenger transport service on the performance and quality of railway services;
 - c) The impact of the new railway passenger transport service on the scheduling of railway services.

III — Definitions and abbreviations

- a) «Total Costs (CT)», correspond to the sum of fixed costs and variable costs attributable to the provision of rail passenger services subject to public service obligations (OSP);
- b) «Fixed Costs (CF)», correspond to the costs incurred by the operator in the provision of railway passenger transport services, independently of the volume of services offered, which may include the costs of administrative staff, as well as the costs of staff directly assigned to the operation of the public passenger transport service (namely drivers and train inspectors); financial charges on invested capital, amortisations, insurances, rental of facilities and other fixed costs;
- c) «Variable Costs (CV)», comprises the costs that vary according to the railway passenger transport services subject to the OSP, including in this category the costs of electricity and/or fuel, infrastructure charges (e.g. infrastructure utilisation fees), maintenance and repair costs for vehicles used in the operation of the public transport service, rolling stock, among others;
- d) «Exploration Revenues (RE)», correspond to the sum of the annual tariff revenues resulting exclusively from the application of the tariff and the commercial revenues related to the service, net of any financial subsidy from the State, namely compensatory indemnities;
- e) «Traffic revenues (Rt)», correspond to the revenues obtained by the operator from the sale of transport tickets, calculated on the basis of the average price of the service (P) multiplied by the number of passenger (Q);
- *f)* «Commercial revenues (Rc)», correspond to the revenues obtained by the operator from the sale of other products in the context of the provision of railway passenger transport services, namely publicity services, catering, on-board sales, including newspapers and magazines;
- g) «Public Service Obligation (OSP)», a charge defined or determined by a competent authority with a view to ensuring public passenger transport services of general interest which an operator, if acting in their own commercial interest, would not assume or would not assume to the same extent or under the same conditions without compensation;
- *h)* «Public service obligation compensation», any advantage, in particular financial, granted, directly or indirectly, by a transport authority to a public service operator, through public resources, during the period of execution of a public service obligation or referring to that period;
- *i)* «Total Remuneration (RT) of the railway undertaking that executes the public service contract », corresponds to the sum of the exploration revenues (RE) and the compensation for public service obligations (OSP);
- *j)* «Real Labour Productivity per Hour » Economic competitiveness indicator produced by the National Statistics Institute [Instituto Nacional de Estatística] (INE), which is obtained by the ratio between the Gross Internal Product [Produto Interno Bruto] (PIB), in euros at current prices and the number of hours worked in the calendar year;
- k) «Profitability Index (IR)», ratio between the present value of exploration revenues (RE) and total costs (CT) relating to the new railway service(s);
- *I)* «WACC Weighted Average Cost of Capital », corresponds to the weighted average cost of capital underlying the financial model of the public service contract; and
- m) «TIR Internal Rate of Return», the internal rate of return underlying the financial model of the public service contract.

IV — Evaluation of the economic impact of the new railway transport service in the light of the Inclusive, Efficient and Sustainable Mobility paradigm (MoblES)

a) MobIES

AMT conducts the economic evaluation of the new railway transport service and the respective impact on the relevant market(s), with a view to promoting and defending the public interest of Inclusive, Efficient and Sustainable Mobility (MobIES), building a paradigm for non-distorted competition, and promoting the confluence of the dynamic and resilient balance of the non-additive rationalities of Investors, People, including the Professionals/Customers/Users/Citizens, and Taxpayers, in a holistic and multidisciplinary approach.

b) Evaluation of impact in the light of rationalities: investors, people and taxpayers

i) Rationality of investors

- 1 As for rationality of investors, AMT proceeds to weigh up all factors that may contribute to the optimisation of sustained, productive and structuring investment in the Mobility and Transport Ecosystem, in order to encourage credible dynamics for the competitiveness of the entire value chain and induce sustainable economic growth and cohesion.
- 2 AMT's evaluation regarding a new railway passenger transport service aims to guarantee non-distorted competition in the market between the entrant applicant and the railway undertaking that executes the public service contract, basing its evaluation on three different strands of analysis:
 - a) The profitability analysis of the new railway service;
- b) The analysis of the impact of the new railway passenger transport service on the economic equilibrium of the public service contract; and
- c) The analysis of the impact of the new railway passenger transport service on the profitability of the railway undertaking that executes the public service contract.
- 3 The analysis of the profitability of the new railway passenger transport service, referred to in subparagraph a) of paragraph 2 above, is carried out by AMT using the profitability index for the new railway transport service, in which:
- a) The Global Return Index (IRG) is calculated according to the following formula, rounded to two decimal places:

IRG =
$$\frac{\sum_{t=1}^{n} \frac{RE_{t}}{(1+i)^{t}}}{\sum_{t=1}^{n} \frac{CT_{t}}{(1+j)^{t}}}$$

Where:

«IRG» — Global Profitability Index;

«RE_t» — Exploration revenues relating to the new railway passenger service, in the year (t);

 (CT_t) — Total costs related to the new railway passenger service, in the year (t);

«t» — corresponds to the operating period of the new railway service, in years;

«i» — discount rate relative to revenues used by the European Commission and the European Investment Bank in the Cost-Benefit Analysis of investment projects co-financed by these entities;

«*j*» — discount rate for costs used by the European Commission and the European Investment Bank in the Cost-Benefit Analysis for investment projects co-financed by these entities.

b) The Annual Profitability Index (IRAt) is calculated according to the following formula:

$$IRA_{t} = \frac{\frac{RE_{t}}{(1+i)^{t}}}{\frac{CT_{t}}{(1+j)^{t}}}$$

Where:

 $\ll IRA_t \gg$ — Annual Profitability Index in the year (t);

«REt» — Operational revenues related to the new railway passenger service, in the year (t);

 $\ll CT_t$ » — Total costs related to the new railway passenger service in the year (t);

«i» — Discount rate for revenues used by the European Commission and the European Investment Bank in the Cost-Benefit Analysis of investment projects co-financed by these entities;

«*j*» — Discount rate for costs used by the European Commission and the European Investment Bank in the Cost-Benefit Analysis for investment projects co-financed by these entities.

- c) AMT considers the profitability condition met when, cumulatively:
- i) The IRG result is equal to or higher than 1 (unit);

The result of the IRAt(s) referring to the initial 5-year period (ramp up) is equal to or higher than the minimum annual coverage rates identified in Table 1, for each of the years of operation:

TABLE No. 1

Minimum annual coverage rates

t (Year)	1	2	3	4	5
IRA(t)	50 %	60 %	75 %	85 %	100 %

- 4) The analysis of the impact on the economic equilibrium of the public service contract aims to quantify the net financial impact of the new railway passenger transport service on the net balance of costs and revenues resulting from the fulfilment of the OSPs, established under the public service contract.
- a) The impact on the economic equilibrium of the public service contract will be measured according to the following formulas:

Net Financial Impact (IF)

$$IF = SL_{NSE} - SL_{CSP}$$

Where:

«*SL*_{NSF}» — Net Balance after the entry of the new operator, reflecting the foreseeable impact of the new rail service on the operating results of the railway undertaking performing the public service contract [€]:

a1) Net balance after new operator's (SL_{NSF}):

$$SL_{NSF} = RE_{NSF} - CT_{NSF}$$

Where:

 ${}^{\mathsf{K}}RE_{\scriptscriptstyle{NSF}}{}^{\mathsf{N}}$ — corresponds to the operational revenues earned by the operator performing the public service contract, including the impact of the new railway service on said revenues;

a1.1) Operational Revenues after new railway service (RE_{NSF}):

$$\textbf{RE}_{\textbf{NSF}} = \quad \sum_{t=1}^{n} RE_{\textit{CSPt}} * \left[1 + \frac{(P_{\textit{NSFt}} * Q_{\textit{NSFt}}) - (P_{\textit{CSPt}} * Q_{\textit{CSPt}})}{P_{\textit{CSPt}} * Q_{\textit{CSPt}}} \right]$$

Where:

 P_{NSFt} — price of tariffs charged in year (t) due to the new railway service;

 ${}^{\vee}Q_{NSFt}$ » — estimate of the number of passenger carried by the operator that executes the public service contract in the year (t), taking into account the impact of the new railway service;

«P_{CSPt}» — price of tariffs charged in year (t) under the public service contract; and

 ${}^{\vee}Q_{CSPt}$ » — estimate of the number of passenger carried in the year (t) under the public service contract, according to the financial model's demand estimates of the public service contract;

«t» — corresponds to the operational period of the new railway service.

a1.2) Total costs arising from the impact of the new railway service (CT_{NSF}):

$$\mathsf{CT}_{\mathsf{NSF}} = \sum_{t=1}^{n} CT_{CSPt} * \left[1 + \frac{(CV_{NSFt} - CV_{CSPt})}{(CV_{NSFt})} \right]$$

Where:

 $\mbox{$^{\prime}CT_{CSPt}}$ — corresponds to the total costs incurred by the operator under the public service contract in year (t), according to the financial model of the public service contract;

 (CT_{NSFt}) — corresponds to the revised estimate of the operator's total costs under the public service contract in year (t), accounting for the impact of the new railway service;

«t» — corresponds to the operating period of the new railway service.

a2) Net balance of the public service contract (SLCSP):

$$SL_{CSP} = \sum_{t=1}^{n} RE_{CSPt} - \sum_{t=1}^{n} CT_{CSPt}$$

Where:

 $\ensuremath{^{\circ}} CT_{CSPt}$ $\ensuremath{^{\circ}}$ — corresponds to the total costs incurred by the operator under the public service contract in year (t), contained in the financial model of the public service contract;

«t» — corresponds to the operating period of the new railway service.

- *b*) AMT considers there is a substantial negative net financial impact of the new railway service on the public service contract when:
 - i) The result of IF is less than 0 (zero); and
 - ii) The sum of the SLNSF and compensation for public service obligation (CSP) is less than 0 (zero):

Substantial negative net financial impact \Rightarrow IF < 0 \land (SL_{NSF} + CSP) < 0

- 5) The analysis of the impact on the profitability of the railway undertaking performing the public service contract is carried out by AMT with reference to the TIR underlying the public service contract and its variation due to the new railway passenger service and the WACC.
- a) The evaluation of the impact on profitability of the railway undertaking performing the public service contract will be quantified by comparing:

The TIR of the public service contract operator before (TIRCSP) and after (TIR $_{\rm NSF}$) the new railway service; and

The TIR_{NSF} and WACC.

b) The new rail passenger transport service is considered to have a substantial negative impact on the profitability of the railway undertaking the public service contract whenever, cumulatively, it occurs:

There is an increase in the opportunity cost of the invested capital, translated into a rate of remuneration of the capital invested (WACC) higher than the internal rate of profitability TIRNSF, i.e., $WACC > TIR_{NSF}$:

Substantial negative impact on profitability $\Rightarrow TIR_{NSF} \leq TIR_{CSP} \land WACC > TIR_{NSF}$

ii) Rationality of People, including Professionals/Customers/Users/Citizens

- 1 With regard to the rationality of People, including Professionals/Customers/Users/Citizens, AMT evaluates the benefits resulting from the new railway services focusing on the economic and social efficiency of passenger transport related to travel time value.
- 2 The impact evaluation of the new railway passenger transport service on the value of journey time aims to measure eventual economic benefits (BE) to society, referencing: i) the difference between the estimated values of journey time under the public service contract, and under the new railway passenger service, and ii) the resulting surplus for passengers, calculated according to the following formula:

$$\mathsf{BE} = \sum_{i=1}^{n} [\mathsf{P}_{\mathsf{CSPi}} * (\mathsf{VoT}_{\mathsf{CSPi}} - \mathsf{VoT}_{\mathsf{NSFi}}) + 0.5 * \mathsf{P}_{\mathsf{NOPi}} * (\mathsf{VoT}_{\mathsf{CSPi}} - \mathsf{VoT}_{\mathsf{NSFi}})]$$

Where:

 P_{CSP} — number of passenger transported by the operator under the public service contract in year (i);

«PNOP» — number of passenger transported by the operator of the new railway service in year (i);

«VoT_{NSF}» — estimated value of journey time, taking into account the joint offer of the public service contract and the new railway passenger service [€];

«VoT_{CSP}» — Estimated value of journey time under the public service contract [€];

«i» — corresponds to the operating period of the new railway service.

a) «VoT_{NSF}» — estimated value of journey times as a joint offer of the public service contract and the new railway passenger service:

$$VoT_{NSF} = \sum_{i=1}^{n} \frac{TiC_v}{2} + \sum_{i=1}^{n} \frac{L_VC_v}{Vi}$$

Where:

- «T» interval time between trains on a given line (hours) and time slot, within the joint offer of the public service contract and the new railway service;
- «Cv» value of time hour-passenger provided by INE, based on labour productivity per hour in the previous year [€];
- « V» average train speed in the scope of the joint offer of the public service contract and the new railway service [Km/hour];
 - «Lv» average journey distance per passenger, between origin and destination [Km];
 - «i» time slot for peak periods.
 - b) VoT_{csp} Estimated value of journey time under the public service contract:

$$VoT_{CSP} = \sum_{i=1}^{n} \frac{TiC_v}{2} + \sum_{i=1}^{n} \frac{L_VC_v}{V_i}$$

Where:

- «T» interval time between trains on a given line (hours) and time slot, within the public service contract offer;
- «*Cv*» value of time hour-passenger provided by INE, based on labour productivity per hour from the previous year [€];
- ``V" average train speed in the scope of the public service contract on the same time slot [Km/hour];
 - «Lv» average journey distance per passenger, between origin and destination [Km];
 - «i» time slot for peak periods.
- 3 AMT considers the requirement for economic benefits associated with the value of travel time is met when BE is positive:

Positive economic gain ⇒ BE > 0

- 4 Additionally, AMT assessment will also consider any positive externalities in the network, namely:
 - a) Improvement of the network connectivity, including connections with international networks;
- b) Possible agreements with other rail, road, river, sea and air transport operators to offer combined products enhancing integration between various transport modes, promoting intermodality;
- c) Increased productivity of the infrastructure manager's, including enhanced capacity utilization; and
- d) Improved accessibility of the regions benefiting from the new railway service, especially in regional rail transport.

iii) Taxpayers' rationality

1 — With regard to taxpayer's rationality, namely the impact of the new railway service on the net cost to the competent authority that awards the public service contract, AMT's evaluation will be conducted based on the net economic impact on the public service contract and compensation amounts for contractually established public service obligations.

2 — In this regard, net cost to the competent authority will be calculated using the following formula:

Where:

«CLF» — net cost to the competent authority due to the new railway service;

 $«SL_{NSF}»$ — net balance after the start of the new railway service, calculated in accordance with paragraph 4 of point i. (Investors' Rationality);

«IC» — amount of compensation by public service obligation.

AMT considers a negative impact on public spending when the IC amount is insufficient to cover SLnsf, i.e. indicating the need for the State to increase IC to compensate for the additional deficit generated by the new railway service.

- 3 In evaluating this parameter, AMT will also take the following into account:
- i) The variation in the IC ratio per beneficiary passenger, before and after the new railway service;
- ii) The contribution to the State from taxes collected as a result of the new railway service;
- *iii*) Potential compensations to be paid by the State within mechanisms for restoring economic equilibrium and exclusivity rights.

V — Dynamic and Resilient Balance of Rationalities

- 1 Rationalities are non-additive, but interact dynamically, and their assessment must be integrated and holistic, on a case-by-case basis, taking into account and valuing factors such as:
 - i) Promotion and defence of the public interest of the MobIES;
- *ii)* Promotion of non-distorted competition and a favourable environment for sustained, productive and structural investment;
- *iii)* Qualification and creation of sustained employment, as indispensable elements for national economic and social development and cohesion;
- *iv*) Competitiveness and cohesion of national territories, as well as a dynamic of valorisation of country's strategic geographical position on Europe's Atlantic Front; and
- v) Reducing the level of polluting emissions and transition to a low-carbon economy, based on cleaner technologies and new business models.
- 2 Without prejudice to case-by-case analysis, AMT's final decision will be based on the evaluation of these rationalities, resulting in one of the following:
 - 2.1 Grant of access, if overall analysis parameters are met for each rationality;
- 2.2 Grant of access, conditioned to alteration of the service offer, when one or more of the necessary conditions underlying each rationality are not met, but can be addressed by adjusting the service offer:
- 2.3 Grant of access, for a limited period, pending the result of the economic equilibrium test to be carried out in accordance with Article 5, paragraph 2, and with Article 9, paragraph 7, if overall parameters of analysis under each of the rationalities are met.

- $2.4\,\,$ Refusal of access when the necessary conditions for each of the rationalities are not met globally.
 - (1) Stated Definition of Decree-Law No. 167/2008, of 26 August.
 - (2) http://www.amt-autoridade.pt.
 - 3 October 2019. The President of the Board of Directors, João Fernando do Amaral Carvalho.