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Annex A to Decision no. 16 of 8 February 2018

Regulatory measures laying down “Minimum quality requirements for national and local passenger transport services by rail, that are subject to public service obligations, pursuant to article 37 (2) (d) of Decree-Law no. 201 of 6 December 2011, converted, with amendments, into Law no. 214 of 22 December 2011”

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Glossary and acronyms

1. For the purpose of these regulatory measures, the following definitions shall apply:
 - a) *Adequacy of the service*: extent to which the services offered meet the essential needs of passengers;
 - b) *AE - Awarding Entity*: public body, or entity delegated by a public body, that is entrusted with the responsibility of awarding a public service contract to a RU, and is in charge of the management, monitoring, verification and control of the public service contract (PSC);
 - c) *Competent authority*: public body, or entity delegated by a public body, that is entrusted with transport network planning and service scheduling in accordance with existing legislation. This may be the AE where it is also the entity that concludes the public service contract with the RU;
 - d) *Consumer associations*: recognized associations pursuant to the criteria laid down in Article 137 of the Consumer Code (Legislative Decree no. 206/2005) and other consumer protection associations that concluded a memorandum of understanding with the AE, as well as representatives of rail season-ticket holders through appropriate representative committees;
 - e) *CSS*: Customer *satisfaction surveys* (cf. perceived quality);
 - f) *Delivered quality*: quality level achieved, as resulting from objective measurements;
 - g) *Disabled person or Person with reduced mobility or PRM*: any person whose mobility when using transport is reduced due to any physical disability (sensory or locomotory, permanent or temporary), intellectual disability or impairment, or any other cause of disability, or as a result of age, and whose situation needs appropriate attention and adaptation to his or her particular needs of the service made available to all passengers;
 - h) *DPM*: *Direct Performance Measure* as defined in UNI EN 13816, C.6;
 - i) *Expected quality*: quality level that is explicitly or implicitly requested by customers (expectations);
 - j) *Framework Agreement*: “an agreement of a general, legally binding nature, governed by public or private Law, which defines the rights and obligations of an applicant and of the infrastructure manager in relation to the infrastructure capacity to be allocated and the charges to be levied for a period in excess of the period of validity of a working timetable” (cf. Article 3 (1) (gg) of Legislative Decree no. 112 of 15 June 2015);
 - k) *IM*: Infrastructure manager;
 - l) *MQR*: *minimum quality requirement*;
 - m) *NS*: Network Statement — “document where the general rules, deadlines and criteria relating to the systems to determine and levy the charges for access and use of the railway infrastructure and the consideration due for the services supplied, as well as those relating to the allocation of capacity, are published in detail, and which also includes any other information necessary to submit requests for infrastructure capacity” (cf. Article 3 (1) (l) of Legislative Decree no. 112 of 15 June 2015).
 - n) *OTS*: online ticketing systems;
 - o) *Peak hours*: time slots (and corresponding trains) identified with the time span 06:00-09:00 a.m. (with reference to the time of arrival at the stations of destination) and 05:00-08:00 p.m. (with reference to the time of departure from the stations of origin), Mondays through Fridays;
 - p) *Perceived quality*: passengers’ impressions/opinions/views on the quality of the services supplied;
 - q) *Performance Regime*: performance monitoring system based on end-of-service delays by all trains operated on the national infrastructure;

- r) *Relevant demand*: commuting demand in peak hours;
- s) *Relevant intermediate stations*: all type-A stations, and only type-B and type-C stations with scheduled interchange with other modes of transport;
- t) *RU — Railway Undertaking*: an undertaking or group of undertakings governed by public or private Law providing rail passenger services and related ancillary and support services on the basis of a public service contract;
- u) *SM*: Station manager;
- v) *SPS*: stated-preference surveys and surveys on the reasons for non-use of the service;
- w) *TVM*: Ticket vending machines;
- x) *Stations*: facilities specially equipped for passenger boarding or alighting, where trains can meet, overtake or change track or, in the stations where several lines branch off (junction stations), move from one line to another, and stop for the performance of the service (as defined by ANSF¹ Decree no. 4/2012);
- y) *Stops*: facilities not falling under the definition referred to under (w), specially equipped for passengers boarding or alighting;
- z) *TSI*: Technical specifications for interoperability relating to accessibility of the rail system for persons with disabilities and persons with reduced mobility referred to in Regulation (EC) No 1300/2014.

¹ TN: ANSF - Agenzia Nazionale per la Sicurezza delle Ferrovie (National Railways Safety Agency).

Introductory note

These regulatory measures lay down the minimum quality requirements of national and local rail passenger transport services, that are subject to public service obligations, as identified according to territorial characteristics of demand and supply, pursuant to article 37 (2) (d) of Decree-Law no. 201 of 6 December 2011, converted, with amendments, into Law no. 214 of 22 December 2011 establishing the Authority (hereinafter: ART).

The measures contained herein shall apply to rail passenger transport services of both regional and local (hereinafter: “regional”) and national interest, that are subject to public service obligations. The Measures do not differentiate among different services unless this is explicitly mentioned.

The measures shall be applied by awarding entities (AE) and Railway Undertakings (RU), operating either on national or interconnected national rail network, or on isolated networks, that hold public service contracts (PSC) awarded in accordance with all the awarding modalities provided for by the Law, even with the gradual introduction of some Measures concerning public service contracts related to RUs operating services on the networks referred to in Article 1 (2) (b) of Legislative Decree no. 112 f 15 July 2015. The provisions under Measure 15 shall also have effect on Infrastructure Managers (IM) and Station Managers (SM), in accordance with the modalities set out in the Framework Agreements (QA) or other arrangements governing their relationship with the AE.

The Measures shall apply to published tender notices and, in the case of restricted procedures, to the transmission of invitation letters, as well as to contracts that are awarded directly or through in-house arrangements after the date of entry into force of these regulatory measures, that corresponds to the date of publication of the decision of approval.

The Measures shall further apply to public service contracts entered into before the date of entry into force of these regulatory measures, which are subject to a revision, where required, including on the basis of the provisions of Article 2 (461) (c) of Law No. 244 of 24 December 2007, following the entry into force of these regulatory measures.

Lastly, the provisions of Measure 15 shall apply to supplements to the Framework Agreements and other arrangements governing the relationship between the AE and the IM/SM, that are adopted after the date of entry into force of the above decision. On the same terms, the Measures shall also have effect on:

- a) (Quality) Customer Charters for rail passenger services which, pursuant to Article 2 (461) (a) of the same Law, describe the quality and quantity “standards” of the supplied services as set out in the PSC;
- b) planning activities for the transport services referred to in Articles 14 and 16 of Legislative Decree no. 422 of 19 November 1997;
- c) Framework Agreements (or any other arrangements) concluded by the AE with the IM/SM, as supplemented under the terms set out in the Annex to ART’s Decision no. 140/2017 of 30 November 2017 (2.1 and 2.2.7), with regard to the provision, inside the railway stations concerned, of services concerning:
 - i. information to be provided to users;
 - ii. cleanliness and comfort of areas open to the public;
 - iii. autonomous accessibility to stations to be adopted for all users, with particular reference to PRM, as well as PRM assistance services provided by the IM/SM;
 - iv. passenger safety inside the railway infrastructure.

Title I — GENERAL CRITERIA

Measure 1 — Minimum quality requirements and related application criteria; public service obligations

1. The minimum quality requirements (MQR) of services, to be measured through qualitative and quantitative indicators and levels, identify (minimum) obligations and/or performance that ensure the fulfilment of users' essential mobility needs under conditions of efficient use of public resources, which are intended to provide compensation for public service obligations.
2. The qualitative and quantitative level of the services shall meet the specified public service obligations for scheduled services in terms of relations to be served, frequencies, timetables, periodicity, provision of seats, availability of seats for PRM, so as to determine an adequate supply defined by the AE in accordance with the criteria under Measure 2.
3. The minimum qualitative and quantitative indicators and levels are defined, measured, monitored and verified by considering:
 - a) territorial, social and economic, temporal characteristics of demand;
 - b) territorial characteristics of supply inside within each of the mobility areas of reference for the awarded services;
 - c) characteristics of infrastructure, as referred to under (9) of this Measure, and rolling stock, with particular reference to the opportunities arising from technological developments and automatic diagnostic devices as set out in the following Measures.
4. For the sole purpose of the penalty relief procedure referred to under Measure 4, for the first regulatory year only, the AE shall define, for each indicator, the $L_{(x-1)}$ level to be used for the comparison of the performance rendered by the RU. The definition of initial $L_{(x-1)}$ levels, as set out in paragraph 3 of the above-mentioned Measure 4, is provided by considering:
 - a) the maximum value of the average target values defined in the previous PSC and the average values achieved over the last three years;
 - b) for the indicators for which no data are available, the comparison will be made starting from the second year of the contract by taking as reference the levels achieved at the end of the first year;
 - c) for indicators whose MQR is of a binary type, the value is established on the basis of the provisions of each of the Measures concerned.
5. For all procedures of service awarding allowed by the law, additional quality indicators and related minimum levels, if any, complement the MQR; they are established by the AE, generally with stakeholders' participation, through special public consultation procedures prior to the publication of the tender notice, the transmission of the invitation letter, also referred to in Measure 2 of Annex A to ART's Decision no. 49/2015 or, in case of direct or in-house award, the conclusion of the PSC. The comments collected during this consultation phase and, in general, the outcome thereof, shall be taken into account for the choice of indicators and quality levels of the PSC, in relation to the different awarding modalities used, and to the outcome of:
 - a) systematic monitoring and control of delivered quality, also entrusted to third parties, including consumer associations, as regulated in the PSC;
 - b) monitoring of alerts, proposals and complaints received by both the RU, the AE and the SM/IM;
 - c) surveys on the quality expected by users and non-users (potential users), referred to in Measure 5 below, that are carried out either directly or through third parties by the competent authority in charge of scheduling the service;

d) surveys on the quality perceived by regular and occasional users, that are carried out by both the RU and the SM/IM, by addressing third parties, and by the AE.

Both the outcome of the consultations and the results referred to under (a) through (d) above are illustrated in a report accompanying the awarding documents.

6. In the case of direct or in-house award, the AE may establish in the PSC higher levels than those defined as minimum levels in these measures and provide for additional indicators. In the case of award by tendering procedure, the indicators and related minimum levels shall be included in the PSC models that are annexed to the tender notices or invitation letters where they are tender elements. The AEs may also establish higher levels than those defined as minimum levels under these measures, it being understood that higher qualitative and quantitative levels, additional indicators and related minimum levels may in any case be offered by competitors, to be assessed for the purpose of the awarding procedure in accordance with the relevant assessment criteria set out in the tender notice or invitation letter.
7. The minimum qualitative and quantitative levels of services are defined in the measures referred to in Title II concerning the following quality factors:
 - a) availability of transport services (and seat availability) that is appropriate to the citizens' demand for mobility;
 - b) service regularity and punctuality;
 - c) information to users;
 - d) transparency;
 - e) commercial accessibility;
 - f) cleanliness and comfort of rolling stock and infrastructure to the public;
 - g) public accessibility of vehicles and infrastructure (with particular reference to PRM);
 - h) travel and traveller safety, both personal and financial.
8. In addition to the foregoing, the AE and other competent authorities shall ensure minimum quality requirements, including by reference to intermodality and integration of services and environmental impact by determining specific performance standards in order to provide, respectively:

Intermodality

 - a) integration of scheduling, in terms of interchange time between rail service and other modes, net of transfer time. In particular, efficient and effective correspondence between different services shall be provided when they allow access to primary administrative, health and social care or cultural services;
 - b) fare integration, in terms of integration of travel passes and related technological supports, with particular reference to online ticketing systems, in accordance with the specifications for interoperability, including those relating to different operators and types of services;
 - c) integration of information on services by other economic operators providing passenger transport and ancillary services, also in the form of intermediation.

Environment

 - a) efficient use of energy and fuels, including for containment of pollutant emissions, through, *inter alia*:
 - i) promotion of programmes of rolling stock renewal with greater environmental sustainability, as well as operational programmes that are aimed, for example, at the timely measurement of energy consumption with on-board technologies and equipment (with particular reference to rolling stock already in operation), complying with international regulatory standards, and/or at testing alternative traction power supply, such as biofuels and hydrogen;

- ii) definition and monitoring of performance indicators that compare the energy consumption of the rolling stock used to measures such as passenger-km, seat-km, trains-km, on the basis of a segmentation of the rolling stock also by type of (electric and diesel) power supply. In the case of rolling stock already in operation and with no on-board electricity metering systems, in the absence of indications by the IM, the RU shall identify, in collaboration with the IM, “energy consumption” classes;
 - iii) definition and monitoring of performance indicators that compare the production of climate-changing emissions (CO₂) and emissions affecting air quality (PM, NO_x) generated by the use of diesel for the provision of transport services, to the total number of passengers-km transported.
9. The measures under Title II shall consider, where relevant, the following differentiation for regional transport with regard to the definition of indicators and minimum levels, on the basis of the following classifications of:
- a) lines: in relation to the ratio of the number of trains in the average working day for each line to the total number of trains in the same period inside the reference area:
 - i) FR1, with number of trains_line/trains_network > I₁;
 - ii) FR2, with number of train_line/trains_networks within the range of I₁ to I₂;
 - iii) FR3, with number of trains_line/trains_network < I₂.

The AE defines the threshold values I₁ and I₂ (with I₁>I₂) on the basis of the territorial, social, economic and temporal characteristics of demand and the territorial characteristics of supply;
 - b) stations (or nodes): on the basis of the passengers served compared to those served in the aggregate by all stations in the area of reference, for regional rail services, during the average working day:
 - i) type-A stations, with passengers_station_number /passengers_area_number > P₁;
 - ii) type-B stations, with station_passengers_number/passengers_area_number within the range of P₂ and P₁;
 - iii) type-C stations, with passengers_station_number/passengers_area_number < P₂.

The AE defines the threshold values P₁ and P₂ (with P₁>P₂) based on the territorial, social, economic and temporal characteristics of demand and the territorial characteristics of supply. The station, or stations (not stops), serving a provincial capital (or one of the cities that constitutes a provincial capital, e.g. Province Forlì-Cesena), are considered as type-A. For medium-long distance rail services (hereinafter: MLD), the measures under Title II consider, where relevant, the differentiation of the lines referred to under (a) above and the nodes, on the basis of the following classification by:

 - i) type-A stations, corresponding to Platinum and Gold stations;
 - ii) type-B stations, corresponding to Silver and Top Silver stations;
 - iii) type-C stations, corresponding to Bronze stations.

Measure 2 — Planning criteria for demand-adapted supply of services

1. In order to ensure an adequate supply of services, the AE or other competent authority shall plan the rail transport services in order to meet the essential mobility needs in the context of the scheduling of transport services referred to in Articles 14 and 16 of Legislative Decree no. 422/1997; for this purpose, the transport supply and the qualitative and quantitative levels of the service shall be proportional to the extent of the demand for actual and potential mobility, and to its territorial and temporal distribution, for each mobility area, as provided for in Measure 1 of the Annex to ART’s Decision no. 48/2017.

2. The scheduled supply of services shall also consider the existing infrastructure availability and the investment programmes in relation to Framework Agreements and Programme Agreements concluded by the competent authority, including in terms of:
 - a) infrastructures affecting the railway capacity of line, nodes and their developments;
 - b) structure of the network in terms of type of power supply;
 - c) infrastructures affecting the accessibility of stations/stops, including with regard to improving the interconnection with other transport modes;
 - d) infrastructures affecting punctuality.
3. The AE shall disclose on its website all the actions underlying the scheduling of the services, by specifying, in particular, the criteria on which basis the supply of transport services has been sized to meet the needs, including comfort, of travellers in the commuter segments. In the same way, the criteria by which quality indicators and standards have been defined in the PSC, even if they do not coincide with MQR, are disclosed as well, with particular reference to:
 - a) territorial, temporal and subjective characteristics of demand that were assumed as reference;
 - b) methodologies used to identify the demand taken as reference;
 - c) model used to estimate the demand for movements in the network;
 - d) available public resources, investment plan and related minimum service programme;
 - e) rolling stock characteristics related to the supply of capacity in total number of seats and seat-km (possibly including a maximum number of permissible standing passengers), existing air conditioning and/or heating facilities, characteristics of accessibility, safety and related costs;
 - f) report on the outcomes of the consultation referred to in Measure 1 (5).
4. In compliance with the existing safety regulations, the scheduled supply takes into account, having established the frequency of the service, the type of rolling stock to be used and its preparation, the average time standing. The PSC provides for the obligation to identify the hourly crowding index, measured as standing passengers/sqm, considering only the useful wagon surface for the standing trip (i.e. excluding the area occupied by seating and the areas intended for passenger exit). The AE shall include in the PSC items aimed at progressively reducing the crowding index.

Measure 3 – Monitoring and periodic verification of minimum quality requirements. Transparency on the efficient use of resources and obligation of data access

1. In line with the purposes and features of the MQR measures referred to herein and of the penalty system adopted for this purpose, the AE lays down in the PSC the monitoring and reporting obligations to be borne by the RU and the procedures to assess and verify the performance under its responsibility, according to criteria that ensure effectiveness and efficiency of the solutions adopted, as well as maximum transparency and accessibility of data and results by the stakeholders involved, together with their regular publication and sharing.
2. The monitoring of the performance by the RU may be carried out automatically or manually through regular data reporting to the AE. In the event of automatic monitoring, the RU shall make every effort to allow the AE to access the information systems for data retrieval in order to check the indicators. As part of the monitoring activities, the RU provides for systematic customer listening to collect and analyze any complaints and suggestions for improvement.
3. The AE shall verify whether the minimum requirements are appropriate by involving consumer associations, pursuant to Article 2 (461) of Law no. 244 of 24 December 2007.

4. The AE shall provide for the verification activities with a sample survey at least every six months, except as provided for in Measure 7 (20), with reference to the frequency of verification only. The choice of the items to be checked may be supplemented by considering the information arising from any alerts and/or complaints. The verification procedures are subject to an improvement plan in the period of application of the PSC, with a view to gradually ensure the achievement of a verification on a quarterly basis, based on monthly surveys for each PSC. The AE shall describe the improvement plan in a report to be transmitted to ART within one year of conclusion of the contract.
5. The qualitative and quantitative levels of the services defined in the PSC, including the minimum ones, are subject to periodic assessment, at intervals corresponding to three- or five-year regulatory periods, if they are consistent with the duration of the PSC. The choice of the duration of the interval shall be made by the AE on the basis of the specificities of the transport service concerned and the characteristics of the demand to be satisfied. The periodic assessment shall concern also the suitability of the qualitative and quantitative parameters or indicators of the supplied service, as set out in the existing PSC, to the users' needs and shall be carried out by involving consumer associations, pursuant to Article 2 (461) of Law no. 244/2007.
6. In order to encourage the development of mobility services and widespread monitoring of the ways rail passenger transport services are provided, as well as the efficient use of public resources to compensate the public service obligations and promote participation in the public debate, the data needed to define the indicators and minimum levels laid down in the measures below, that are produced either directly or indirectly by the RU, SM or IM, are held by the AEs and/or competent authorities in charge of service scheduling and are made accessible and re-usable in accordance with the provisions of paragraph 8 et seq. of this measure, within the limits laid down by Legislative Decree no. 33 of 14 March 2013, as amended.
7. The AE shall regulate in the PSC the automatic or manual methods of passenger counting, including for the application of the provisions referred to in art. 27 (11b) of Legislative Decree no. 50/2017; the data made available shall be used by the AE for the purpose of sizing an adequate service supply, within the meaning of paragraphs 1 and 4 of Measure 2, and adjusting the amount of penalties, in accordance with paragraph 5 of Measure 4. In the case of manual counting, the monitoring of the passengers carried is provided on the basis of the results of the surveys on boarding and alighting passengers, on a reference week with quarterly frequency (two surveys for each of the so-called summer and winter periods, totalling four). The number of passengers carried is processed by each train, each relation, each day of the week, each (peak and off-peak) time slot.
8. Prior to the conclusion of the PSC, the AE defines a "Data Access Plan" by consulting with the major stakeholders, such as, for example, the RU, IM or SM, consumer associations, economic operators providing passenger transport and ancillary services, also in the form of intermediation, and by identifying at least the following:
 - a) set of elementary data available to the AE, as referred to in paragraph 6 above;
 - b) mode of data collection, either automatic or manual. The mode of automatic collection takes place in real-time; in the absence of automatic monitoring systems, the manual data collection provides "ex post" data, that are accounted for based on a defined time interval;
 - c) mode of data access by third parties, subject to compliance with the restrictions on the processing of personal data and with the information which cannot be disclosed due to industrial secrecy, that is guaranteed by the AE, by promoting both the "open access" in editable format, as a general rule and with particular reference to real-time elementary data, and the online data requests;
 - d) the data provider, that is subject to the obligation to provide the information to the AE.

9. The AE promotes the access to real-time elementary data, that are useful to improve the travel experience on the whole, before, during and after the journey, with a user-friendly approach. In this regard, where available, the minimum set of information to be made accessible to users is characterised by elementary data concerning:
 - a) train movements and state of departures and arrivals at stations/stops;
 - b) train accessibility in terms of platforms, available equipment for PRM accessibility, available bicycle transport.
10. The AE shall update the 'Data Access Plan', with reference to real-time data, depending on technological progress, by verifying its suitability, at least at the end of each regulatory period.
11. Further accessible to users, and published on the user information channels of both the AE and the RU, are at least the following documents:
 - a) existing public service contracts including all the annexes; where the contracts have been awarded with prior tendering procedures, the AE may not disclose certain specific data and/or information with sensitive commercial content, such as, in particular, the individual elementary cost items, with the exclusion of the total operating cost, in the economic and financial Plan;
 - b) the documentation concerning paragraph 3 (a) through (f) referred to in Measure 2;
 - c) questionnaire models used for customer satisfaction surveys, together with overview of the results;
 - d) survey on potential mobility demand, as regulated by Measure 1 (1) of the Annex to ART's Decision no. 48/2017;
 - e) quality customer charters;
 - f) annual report referred to in Article 28 of Regulation (EC) No 1371/2007;
 - g) explanatory reports on the outcome of the public consultations referred to in the Annexes to ART's decision no. 49/2015, Measure 2 (6) and ART's Decision no. 48/2017, Measure 4 (12);
 - h) anonymous complaints received by the RU and the AE, classified by reason for complaint, as referred to in the "Complaint form" on ART's website, under the "Online submission of complaints (SiTe)" section.
12. In order to facilitate the wider use of transport services, the AE, as the data controller referred to in paragraph 6, shall make such data accessible and reusable, on fair and non-discriminatory terms, to economic operators providing passenger transport and ancillary services, including in the form of mediation.

Measure 4 – Criteria for application of penalties

1. In line with the minimum quality requirements under these measures, the AE adopts a penalty system that is intended to ensure, throughout the contract period, the compliance with the minimum levels set for each service quality factor and indicator provided for in the PSC concluded between the parties. The penalty system integrates with the system for improving the delivered and perceived service quality and with the efficiency and effectiveness incentive system provided for in Measure 19 of ART's decision no. 49/2015.
2. In the case of binary indicators, that provide for the verification of the adoption of specified requirements, the AE defines a system of penalties proportional to the delay in the implementation of the above requirements.
3. For each non-binary indicator, for each year "x", the penalty is calculated by taking into account the deviation from the minimum level, and a penalty relief system that is related to the improvement process implemented by the RU, based on the following expression:

$$P_x = \alpha [P_u \cdot (MQR - L_x) \cdot K_x]$$

where:

α = progressive coefficient, that considers a downward reduction of the penalty in relation to the gradual application of the measures provided for herein. The coefficient assumes the following values:

- $\alpha = 0.5$ for the first year of the regulatory period of application of the Measures provided for herein;
- $\alpha = 0.8$ for the second year of the regulatory period of application of the Measures provided for herein;
- $\alpha = 1$ for the years of the regulatory period following the second year of application of the Measures provided for herein;

P_u = unit penalty amount determined by the AE;

MQR = minimum level of performance required for each indicator;

and for each year x :

P_x = total final penalty related to the indicator;

L_x = annual average value of the indicator achieved at the end of year x of calculation;

K_x = coefficient of mitigation of penalty, expressed as follows:

$$K_x = \begin{cases} 1 - \Delta_x & \text{per } \Delta_x > 0 \\ 1 & \text{per } \Delta_x \leq 0 \end{cases}$$

Δx = annual variation of performance expressed as:

$$\Delta_x = \frac{L_x - L_{(x-1)}}{L_{(x-1)}}$$

where:

L_x = annual average of the indicator achieved at the end of year x ;

$L_{(x-1)}$ = annual average of the indicator achieved in the months of season y of the year preceding the year of calculation, $(x-1)$. The value at time $(x-1)$ in the first regulatory year is defined as indicated in Measure 1 (4).

4. Where the MQR provides for increasing target values to be achieved in the contract period:
 - (a) K_x is assumed as 1 for any Δ_x ;
 - (b) the AE may also provide for a reward system associated with the achievement of higher performance by the RU compared to the MQR.
5. The AE shall adopt a penalty system which, in compliance with the foregoing, sets the unit and overall amount of the penalties laid down for each non-compliance in accordance with the following criteria of effectiveness and proportionality, by considering the following factors:
 - (a) hierarchy of lines and nodes as indicated in Measure 1 (9) (a) and (b);
 - (b) relevant and not relevant demand;

- (c) rolling stock and investments;
 - (d) state of infrastructure;
 - (e) non-compliance severity level : as defined based on the assessment of relevance and on the outcome of the surveys on perceived quality and user and non-user demand, on the stakeholders' consultation and in relation to the expected impact, including in terms of the period covered, in terms of fulfilment of the contractual MQR and their implementation modes;
 - (f) absence of measurable improvements or recurrent non-compliance: where the achieved quality levels are not increasing over time, or single cases of non-compliance reiterate over a short period of time (e.g. two or three months in a row, as a result of monthly controls), or in relation to cases concerning the same journey, line/direction, station facility and stop, minimum requirement, indicating poor or lacking structural organisation and operation, failure to adopt contingency plans and preventive, implementing and corrective measures that are appropriate to the expected results and performance levels.
6. The AE may provide for reduced annual penalties imposed on the RU in relation to:
- (a) amount of refunds, reissue of tickets, compensation and customer assistance to reduce the inconvenience caused by poor service, even where they do not depend on the RU, pursuant to the provisions of Regulation (EC) No 1371/2007 or to measures adopted by ART in the exercise of the functions referred to in Article 37 (2) (e) of Decree-Law no. 201/2011;
 - (b) proven effectiveness of the measures adopted by the RU for prompt and lasting restoration of regularity and adequate levels of the services provided;
 - (c) objective effectiveness of the measures implemented by the RU to mitigate and equitably compensate the negative impact of the event on the users involved, whether regular or occasional.
7. A case of severe non-compliance, which may give rise to termination of the contract, is the calculation of penalties with an amount exceeding, for three - also non-consecutive - accounting years, 10% of the corresponding annual contract amount.
8. The penalty system adopted by the AE is further defined in accordance with the following criteria:
- (a) exclusion of conducts of the RU that have been already subjected to a penalty pursuant to Legislative Decree no. 70 of 17 April 2014, as the latter cannot be subject to contractual penalties, pursuant to Article 4 (6) of the same Legislative Decree;
 - (b) economic value of the penalties, for each case of non-compliance and annual total amount for the whole system, that is balanced against the aggregate economic contract value and adjusted to ensure the effectiveness and efficacy of the system for timely and full achievement of the minimum contractual terms.
9. The AE further adopts a system to determine and set the amount of the penalties based on the following criteria:
- (a) reference to objective variables, that are proportionally and percentage-wise related to economic parameters and contractual purposes, e.g. unit compensation per vehicle-km as defined in the PSC.
 - (b) application of automatic systems of indexation and adjustment, that keep unchanged over time, i.e. in each regulatory period and throughout the entire contract period, the economic relevance as well as the effectiveness and efficacy, in terms of discouragement and determent, of the parameters applied.
10. The revenues deriving from the application of penalties, net of any rewards, may be allocated by the AE to improve the quality performance levels of the services covered by the PSC and, in particular, to promote measures in support of areas and connections which are more subject to poor service,

including by encouraging measures for technological innovation aimed both at the same purposes and at relieving users for the inconveniences suffered.

Measure 5 – User and non-user surveys on expected and perceived service quality

1. In order to assess the potential demand for mobility and its space- and time-related distribution, in line with the criteria laid down in ART's Decision no. 48/2017, and to ensure an adequate supply of services, the AE or other competent authority in charge of transport service planning, as referred to in Articles 14 and 16 of Legislative Decree no. 422/97, having consulted with consumer associations, carries out *ad hoc* surveys into the reasons for non-use of the service (stated preference surveys – SPS). SPS have a usually three-year frequency, in accordance with the deadlines for the scheduling of local public transport services, pursuant to article 14 (3) of Legislative Decree no. 422/97.
2. According to Measure 1 (5), the AE:
 - (a) takes into consideration the outcome of service and user inquiries to identify criteria to commensurate the penalties, in particular with respect to the order of importance of individual cases;
 - (b) regulates in the PSC the obligation for the RU to participate in the consultations launched by the AE, involving users, consumers, their associations and concerned business associations in the design of survey specifications, analysis of survey results and planning of ensuing actions, by receiving proposals and comments from the stakeholders involved.
3. The AE provides in the public service contract for the obligations of the RU to survey the quality expected and perceived by service users (customer satisfaction surveys: CSS), without prejudice to the AE itself being directly involved in the implementation of the CSSs. The AE involves consumer associations in the ongoing monitoring of the compliance with the parameters set out in the PSC and with the provisions laid down in the quality customer charters, pursuant to Article 2 (461) of Law No 244 of 24 December 2007, while identifying methods to ensure they are carried out under conditions of neutrality and impartiality.
4. The AE regulates the obligations set out in the above paragraphs, in cooperation with the RU and in consultation with consumer associations, including through user surveys, without prejudice to the provisions of Measure 3 (5). Such surveys are carried out in accordance with suitable methodological criteria for the purpose of their full significance in statistical terms and in compliance with the principles of publicity and transparency referred to under Measure 10, and with the following criteria:
 - (a) consistency and exhaustiveness of survey methodologies, in terms of factors and indicators applied in the survey and their ranking, as compared to the minimum quality requirements identified herein concerning the different stages and the whole travel experience, as transposed in the contract and in the quality customer charter;
 - (b) balanced frequency of surveys, that is appropriate to objectives and duration of the contract, to its overall structure and, in particular, to the arrangements within the framework of the incentive system; it should be in any case ensured that the CSS is carried out at least annually, in line with the deadlines and periods of regular review, in order to provide a useful support to define the relevant updates and associated adjustments;
 - (c) adequacy, efficacy and effectiveness of rating scales, which in the case of the CSS can represent and associate, with the necessary granularity and objectivity, the users' level of satisfaction and

order of importance for each minimum requirement. The rating scale to be adopted includes values ranging from 1 to 9, with 7 being the first level of satisfaction and 9 the highest;

- (d) qualification and impartiality of the body in charge of the surveys, that shall be a third party with respect to the RU, with proven expertise and experience;
- (e) consistency and homogeneity of methods and criteria, that ensure the comparability of the results on the temporal (time series) and cross-sectional level, for the purpose of benchmarking at the corporate and sectoral level;
- (f) consistency and integration of the survey system in the wider corporate information system, while ensuring that the results are easily accessible by stakeholders, in accordance with their respective competences and responsibilities; this should guarantee the possibility of cross-analysis of the CSS results with the data and results arising from the other study, monitoring and survey activities carried out by the RU in the different contract areas, so as to better assess the level of consistency between supply and demand and between delivered, expected and perceived quality and to plan the necessary actions aimed at a steady increase over time of the results achieved.

Title III – MINIMUM QUALITY REQUIREMENTS IN PUBLIC SERVICE CONTRACTS – INDICATORS AND LEVELS

Chapter I – Provision of seats

Measure 6 – Indicators and minimum levels of provision of seats

1. The minimum requirement for the provision of seats is ensured by the use of rolling stock with supplied seats, according to the criteria set out in Measure 2 above, that comply with or exceed the requirements specified in the relevant annexes to the PSC. The MQR of seats is therefore measured by the following indicator:

Indicator = CONF, compliance of rolling stock with the operating schedule.

2. **The binary CONF indicator** is 1 in case of trains complying with the requirements of the PSC, and 0 if not. The **minimum level** of CONF indicator is 1.
3. Compliance with the requirements of the PSC referred to in paragraph 2 above is assessed for all trains operated in terms of:
 - a) type (model, predefined or fixed formation);
 - b) no. coaches or no. parts;
 - c) fitting (where, for the same rolling stock model, different types of fitting are in place).
4. At the discretion of the AE, different rolling stock depending on type, formation or fitting out, as referred to in 3 above, may be reduced to a single category by adopting a classification based on the different seating capacity supplied.

Chapter II — Service regularity and punctuality

Measure 7 – Indicators and minimum levels of service regularity and train punctuality

Regularity

1. The minimum requirement of regional rail service regularity is met by the compliance with the contractual operating schedule and by the preparation of an “*Action plan*” for alternative services in case of total or partial cancellation of journeys.
2. The service regularity is measured with the following indicator: **%R_t Service regularity**.
3. The service-related **indicator %R_t** is calculated for each year as the average of the monthly values that are defined as follows: for each *i* month as the ratio between the number of regularly operated trains, including those adequately replaced, and the number of scheduled trains:

$$\%R_{t,i} = \left(\frac{T_{r,i}}{T_{tot,i}} \right) \cdot 100$$

where:

T_{tot,i} = total number of scheduled trains – total number of trains wholly or partially cancelled for external causes and not adequately replaced;

$T_{r,i}$ = number of trains arriving at destination, including trains wholly or partially cancelled for external causes or for causes that may be attributed to the contracting RU or other RUs or the IM, but adequately replaced:

$$T_{r,i} = T_{tot,i} - T_{nsos,i}$$

where:

$T_{nsos,i}$ = number of trains wholly or partially cancelled for causes that may be attributed to the contracting RU or other RUs or the IM, and with delays exceeding the headway to the next train, that have not been adequately replaced and of trains departing in advance from the station of origin or from a relevant intermediate station;

4. The **annual minimum level**, that is measured on a monthly basis, of the indicator of **service regularity** R_t is defined at regional territorial level on the basis of the maximum value between (a) the annual average in the three years prior to the year of award, and (b) the annual average in 2017; this minimum level is updated annually on the basis of a parameter that is determined by the AE depending on the operating schedule adopted, on the infrastructure works in progress and/or planned by the IM in the contract period, and on the rolling stock renewal plan covered by the PSC. The reference values for both the three-year period and for 2017 are calculated as the annual average of the monthly values for the same service and for the same regional territorial level. Only for services carried out on the networks referred to in article 1 (2) (a) and (b) of Legislative Decree no. 112/2015, the AE defines in each PSC the minimum level of the indicator R_t on the basis of a gradual improvement plan during the contract period, which takes into account the criteria set out in Measure 2 (1) and (2).
5. The annual **minimum level** of the regularity indicator for medium-long distance services, that is calculated as the average of the values measured on a monthly basis, is defined by the maximum value between (a) the average recorded in the three years prior to the year of award and (b) the annual average in 2017, as updated annually based on a parameter that is determined by the AE depending on the operating schedule adopted, on the infrastructure works in progress and/or planned by the IM in the contract period and on the rolling stock renewal plan covered by the PSC. The reference values for both the three-year period and for 2017 are calculated as the annual average of the monthly values for the same service.
6. An “Action Plan” is drawn up for the actions to be taken and the services to be provided to users to reach the station of final destination of the journey with an “*appropriate alternative service*” in case of disturbances or total or partial cancellation of journeys.
7. The Action Plan shall specify the cases of poor service, the procedures and arrangements for organization and access to the alternative service, the way of handling the relevant information and the communications to users and the AE and the conditions of passenger assistance.
8. The **minimum level** for an “*appropriate alternative service*” is set out in the Action Plan as specified here below, in relation to at least the following:
 - (a) timely, comprehensive and up-to-date information to be provided to users both in a static form, in the absence of disruptions, and in a dynamic form, in due time in the event of each disruption, on board and at the station and stop facilities, until the service regularity is fully restored as defined in Measures 8 and 9;

- (b) delivery time of the alternative service, which is less than the headway to the next train. The train immediately following the deleted train is considered as one of the ways to offer an adequate alternative service if:
- i) it is scheduled within 30 minutes of the cancelled train for regional services and within 120 minutes for MLD services;
 - ii) it makes the same stops;
- (c) maximum time of arrival at the first station concerned by the train cancellation, in consideration of the provisions of subparagraph (b)(i);
- (d) arrangements for providing the alternative service (train, bus, taxi), which shall be carried out: with a number of means that is proportionate to the number of passengers on the cancelled train; in accessibility and comfort conditions that are as comparable as possible to those provided by the cancelled service so as to ensure that also PRM reach their destination; with equivalent assistance services to PRM to reach the point of supply of the alternative service, as well as boarding and alighting therefrom; covering all the stops that were scheduled for the cancelled train; organizing differentiated alternative services in case of long-distance cancellations with direct alternative routes for longer relations so as to reduce the increasing journey time compared to the cancelled train;
- (e) in the event of train cancellation for whatever cause, a transport service is ensured for the return journey and for the journeys following the cancelled trip, for which the rolling stock was intended to be used.
9. **In case of strike the minimum level** involves the provision of the minimum services as identified and referred to in the official timetable.

Punctuality

10. The requirement of punctuality for each journey consists in the compliance with the scheduled time of arrival at the relevant intermediate stations and at those of destination.
11. The delay is defined as the positive difference, expressed in minutes, between actual and scheduled timetable of the train at a particular location.
12. The punctuality of the service is measured by the indicator **%OS₍₀₋₅₎ Train timetable deviation (0'-5')**.
13. **The indicator %OS₍₀₋₅₎** is calculated for each *L* line and *i* month as the ratio between the number of train arrivals with a maximum delay of 5 minutes and the number of operated trains:

$$\%OS_{(0-5),L,i} = \left(\frac{T_{eff,L,i} - T_{rit,L,i}}{T_{eff,L,i}} \right) \cdot 100$$

where for each *L* line:

$T_{rit,L,i}$ = number of trains presenting, at the station of destination or at one of the relevant intermediate stations, total delays that may be attributed to the IM, contracting RU or other RU, as identified in paragraph 21, accounting for more than 5 minutes.

$T_{eff,L,i}$ = number of scheduled trains – number of wholly or partially cancelled trains.

14. The indicator %OS₍₀₋₅₎ is measured by reference to:
 - (a) *the service relating to non-relevant transport demand*: total trains, net of those with significant demand for the whole day - all days of the week;

(b) *the service relating to relevant transport demand*: trains in the so-called peak hours - from Mondays through Fridays - and specific high-traffic journeys in an average weekday.

15. The monthly **minimum level** of the %OS₍₀₋₅₎ indicator is defined at regional territorial level by the maximum value between (a) monthly average in the three years prior to the year of award and (b) monthly average in 2017, as annually updated on the basis of a parameter that is determined by the AE depending on the operating schedule adopted, on the infrastructure works in progress and/or planned by the IM in the contract period, on the rolling stock renewal plan covered by the PSC and on the improvements arising from the application of the performance regime on punctuality. The reference values are calculated, for both the three-year period and for 2017, as the annual average of the monthly values for the same regional territorial level and for the same transport demand slots as referred to in paragraph 14 above. Only for the services carried out on the networks that are not subject to the performance regime, the AE defines in each PSC the minimum level of the indicator %OS₍₀₋₅₎, on the basis of the gradual improvement plan over the contract period, which takes into account the criteria set out in Measure 2 (1) and (2).
16. With reference only to the **medium-long distance service of national interest**, punctuality is measured through the indicator: **%OS_{ML(0-15)}Train timetable deviation (0'-15')**. The indicator %OS_{ML(0-15)} is calculated for each month as the ratio between the number of train arrivals with a maximum delay of 15 minutes and the number of total operated trains. The formula is similar to that of the indicator %OS₍₀₋₅₎.
17. The indicator %OS_{ML(0-15)} is measured for the entire service, for the whole day – every day of the week. In addition, the indicator %OS_{ML(0-15)} is also considered with reference to each relation in order to ensure adequate service uniformity.
18. The monthly **minimum level** of the %OS_{ML(0-15)} indicator for medium-long distance services is equal to the maximum value between (a) the average in the three-year period prior to the year of award and b) the average monthly value in the year 2017, as annually updated on the basis of a parameter that is determined by the AE depending on the operational schedule adopted, the infrastructure works in progress and/or planned by the IM in the contract period, the rolling stock renewal plan covered by the contract. These reference values are calculated, for both the three-year period and for 2017, as the average of the monthly values for the same service and with reference to the cases referred to in paragraph 17 above.
19. The acquisition of data on train arrivals at stations is ensured by the IM.
20. The monitoring of the levels of train regularity and punctuality indicators is carried out automatically and continuously through the IM's IT system for train operations. The AE shall have access to the data as provided for in paragraph 2.3.9 of Annex A to ART's Decision no. 140/2017. Where automatic data collection is not available, the AE shall acquire the data from the IM, as they are manually collected on a monthly basis. On the basis of the above-mentioned monitoring and reporting of the RUs, the AE verifies the minimum levels on a monthly basis.
21. For the coding of delay and cancellation causes, reference is made to the classification adopted by the manager of the national infrastructure network, RFI – Rete Ferroviaria Italiana, as set out in the "*Operational Communication no. 269/RFI of 30 July 2010*", implementing the EU coding for delay causes "*Fiche UIC 450-2 – edition 2009*".

22. The timetable deviation indicators, that are measured by considering all delay causes, will be used for identification and assessment of user compensation and for infrastructure works planning. For the regional service, the indicator %OSC₍₀₋₅₎ is calculated for each *L* line and *i* month as the ratio between the number of train arrivals with a maximum delay of 5 minutes and the number of operated trains:

$$\%OSC_{(0-5),L,i} = \left(\frac{T_{eff,L,i} - T_{rit,L,i}}{T_{eff,L,i}} \right) \cdot 100$$

where for each *L* line:

$T_{rit,L,i}$ = number of trains presenting, at the station of destination or at one of the relevant intermediate stations, delays of more than 5 minutes, regardless of their cause.

$T_{eff,L,i}$ = number of scheduled trains – number of wholly or partially cancelled trains.

Deviation indicators are measured by reference to:

- (a) *the service relating to non-relevant transport demand*: total trains, net of those with significant demand, for the whole day - all days of the week;
- (b) *the service relating to relevant transport demand*: trains in the so-called peak hours - from Mondays through Fridays - and specific high-traffic journeys in an average weekday.

In the case of medium-long distance services of national interest, the formula of the indicator %OSC₍₀₋₁₅₎ is similar to that of the indicator %OSC₍₀₋₅₎.

23. The timetable deviation indicators referred to in paragraphs 13, 16 and 22 are published by the AE by 31 March of the year following the reference year at the latest. The annual averages of the above indicators and the % of delay broken down by external causes, causes to be attributed to the contracting undertaking, or to the IM and other RUs are published in the quality customer charters.

Chapter III — Information to users and Transparency

Measure 8 – Indicators and minimum levels of information to users (pre-journey)

1. The minimum information requirements to be provided to users and citizens in the pre-journey phase are ensured through the publication and dissemination of the information, that is differentiated by communication channel supplied by the RU/AE and by type (static and dynamic), as listed in Table 1. They are measured with the binary indicator **INFO_AN** that is 1 if 100 % of the information listed in the table is available and 0 if not. The information shall be deemed to be available where it is also compliant; if the information is non-compliant, it is considered as not available. In any case, economic operators interested in providing user information and services are safeguarded under Measure 3 (12).
2. The value of the **minimum level** of INFO_AN indicator is equal to one.
3. The information referred to in this Measure shall be disseminated and published or communicated in a plain language for users (comprising PRM) including occasional users, and for the public, without using technical terms.
4. Non-spoken information at the station shall be supplied and placed so as to ensure maximum readability for font size and use of colour. Spoken information at the station shall be comprehensible in terms of pronunciation and appropriate in terms of sound level.

5. The languages used in the various communication channels referred to in Table 1 are Italian and English. If the RU provides all or part of the information set out in Table 1 by using only the Italian language, it shall draw up, and share with the AE, a plan for the gradual provision of the information over time also in English. In this respect, the AE shall define the objectives for a greater coverage of the information in English, up to a pre-determined level of coverage, to be achieved by the end of the PSC that is in force on the date of publication of this decision.

TABLE 1. Minimum information broken down by communication channel (I)

	Order No.	Type of information	Ticket office at station	Ticket vending machine	Contact centre	Website	Mobile App	Travel agency	Authorised sales outlets
STATIC	1	General conditions of carriage	x		x	x		x	
	2	Indication of the arrangements for consultation of the general conditions of carriage		x			x		
	3	Arrangements for ticket purchase, including on board	x		x	x	X		
	4	Indication of contact channels and arrangements for users' complaints	x	x	x	x	x	x	
	5	Indication of contact channels for user information requests	x			x	x		
	6	Existing pricing system: levels, structure, quantity discounts (travel passes), integration with other tickets (legislative or regulatory references, criteria and calculation formulas, examples for km distances); cost of any additional services	x		x	x			
	7	Arrangements for consultation of Quality Customer Charter	x		x	x	x		
	8	Arrangements for ticket validation and applicable penalties to travellers with no valid tickets	x	x	x	x	x	x	
	9	Train departure and arrival timetables	x	x	x	x	x	x	x
	10	Availability of on-board services	x	x	x	x	x	x	x
	11	Availability of first- and second-class seats, sleeping cars or couchette cars	x	x	x	x	x	x	x
	12	Procedures for the recovery of lost luggage and lost items	x		x	x	x		
	13	Access conditions for bicycles and pets	x	x	x	x	x	x	x
	14	On-board availability of dedicated PRM seats	x	x	x	x	x		
	15	Arrangements for requesting assistance on board and at the station and timeframe required for reservation of PRM dedicated services	x		x	x			
	16	Timetable and conditions for fast journey	x	x	x	x	x	x	x

TABLE 1. Minimum information broken down by communication channel (II)

	Order No.	Type of information	Ticket office at station	Ticket vending machine	Contact centre	Website	Mobile App	Travel agency	Authorised sales outlets
STATIC	17	Timetables and conditions for lower rates	x	x	x	x	x	x	x
	18	List of minimum guaranteed services in case of strike	x		x	x	x		
	19	Passenger information to reach any alternative means	x		x				
	20	Percentage of the total cost for the provision of the service borne by public finance				x			
	21	Annual total remuneration (EUR)				x			
	22	Annual financial compensation (EUR)				x			
	23	Compensation for subsidized or exempted users (EUR)				x			
	24	Objectives, policies and tools for the area of reference associated with environmental sustainability				x			
	25	Reporting documents showing the environmental results achieved in the activities and in corporate organization, based on Corporate Social Responsibility criteria and models, e.g. Global Reporting Initiative (GRI)				x			
DYNAMICS	26	Timetable of arrivals and departures at station or stop, as updated at any change			x	x	x		
	27	Train arrival and departure track			x	x	x		
	28	Indication of delays and cancellations compared to time schedule, as updated at any change			x	x	x		
	29	Scheduled or non-scheduled activities that could interrupt or delay the transport service			x	x			

Measure 9 – Indicators and minimum levels of information to users (during the journey)

1. The minimum requirements of the information to be provided to users and citizens during the journey are ensured through the publication and dissemination of the information, that is differentiated by type (static and dynamic), as listed in Tables 2 and 3 below, and are measured through the binary **INFO_DU** indicator, which is 1 if 100 % of the information listed in Tables 2 and 3, respectively, is available and 0 if not. The information shall be deemed to be available where it is also compliant; if the information is non-compliant, it is considered to be not available.
2. The **minimum** level of INFO_DU indicator is one.
3. The information referred to in this Measure shall be disseminated and published or communicated in a plain language for users (including PRM) and occasional users, and for the general public, without using technical terms.
4. Non-spoken information at the station shall be supplied and placed so as to ensure maximum readability concerning font size and use of colour. Spoken information on board shall be comprehensible in terms of pronunciation and appropriate in terms of sound level. The languages used on board for the information referred to in Tables 2 and 3 are Italian and English. If the RU provides all or part of the information set out in Table 2 and 3 by using only the Italian language, it shall draw up, and share with the AE, a plan for the gradual provision of the information over time also in English. In this respect, the AE shall define the objectives for a greater coverage of the information in English, up to a pre-determined level of coverage, to be achieved by the end of the PSC that is in force on the date of publication of this decision.

TABLE 2. Static information

	Order No.	Type of information
STATIC	30	Indication of channels and contact modalities for users' complaints to the RU
	31	Procedures for submission of complaints to the Transport Regulation Authority
	32	Availability of on-board services
	33	Availability of PRM dedicated seats on board
	34	Information on passenger safety and conduct in case of danger or emergency

TABLE 3. Dynamic information. To be provided by the RU to passengers on board each train by means of suitable public address systems and/or visual displays (where available), under normal travel conditions.

	Order No.	Type of information	Notes
DYNAMICS	35	Next stop	
	36	Main connections, including those operated by other rail carriers (if the information is available to the IM)	
	In case of on-board malfunctions, delays and abnormal circulation, in addition to the above dynamic information, the RU shall provide the following information, including through manual voice announcements by means of appropriate sound systems concerning:		
	Order No.	Type of information	Notes
	37	Delays during the journey	This information shall be: - supplied timely and updated at least every 15 minutes, by indicating the time needed to restore normal travel conditions, if possible. - accompanied by delay and cancellation causes - accompanied by the indication of the procedures to request any reimbursement and/or compensation, both online and offline - where public address systems and/or visual displays are not available or not working on board, information on delays and abnormal operation shall be provided during the journey by the crew that will make the announcements through the sound system or verbally by passing through the carriages. In any case, special attention shall be paid to the needs of people with hearing impairment
	38	Abnormal circulation	
	39	Prolonged stop at station of origin or intermediate station for more than 5 minutes compared to the scheduled departure time	
	40	Prolonged stop on the line for more than 5 minutes	
	41	Cancellation of journey, indication of alternative transport	
	42	Assistance with provision of comfort items	

Measure 10 – Indicators and minimum levels of transparency

1. To ensure minimum requirements of transparency in the service provision and promote the development of services and public control, AEs and RUs shall publish on their web portals the following information and documents, in addition to what is provided under Measures 7, 8 and 9:
 - (a) existing PSCs, accompanied by an overview of the main contractual terms, in particular with reference to:
 - i. annual total remuneration (EUR);
 - ii. annual financial compensation (EUR);
 - iii. financing provided for rolling stock purchase (abs. and absolute cost coverage %);
 - iv. annual compensation for subsidised or exempted users (EUR);
 - (b) existing quality customer charters;
 - (c) draft questionnaires used in customer satisfaction surveys and synthetic outcome thereof;

- (d) annual statement of contractual penalties paid to the AE, broken down by quality indicator;
- (e) all final levels of the indicators defined under these measures;
- (f) main operating indicators, with reference to:
 - i. number of passengers carried and pax · train km;
 - ii. average price (revenue from ticketing/pax no.);
 - iii. rolling stock distribution by age and environmental class;
- (g) coverage ratio: percentage of operating costs covered by traffic revenue

The documents referred to in (a), (b) and (c) above shall be published within 60 days of their adoption or update.

The data and information referred to in (d), (e) and (f) above shall be published by 31 March of the year following the year of reference.

2. At the same time as their publication, the documents, data and information referred to in paragraph 1 shall be transmitted by the AE and the RU in open/editable format to the Authority, that shall publish them in the appropriate section of its website.
3. The transparency of the information is measured through the binary indicator **P_INF, Publication of the information**, that is 1 in the case of publication of all the information and documents referred to in paragraph 1 on the website of the RU and AE, and 0 when one or more information or documents are not published.
4. The value of the **minimum level** of P_INF indicator is one.

Chapter IV — Commercial Accessibility

Measure 11 – Indicators and minimum levels of commercial accessibility

1. The MQR for commercial accessibility is ensured, with reference to the pre-journey phase, by the obligation to provide for:
 - (a) adequate availability of sales channels across the entire network (% ACV);
 - (b) availability/operation of OTS - online ticketing systems (% BTEL);
 - (c) operation of TVM - ticket vending machines (% BAUT);
 - (d) operation of ticket validating machines (%VAL).
2. The MQR under paragraph 1 (a) is met when all stations within the area of reference are found to be equipped with appropriate sales channels. It is measured through the %ACV indicator, expressed as a percentage, that is calculated for each year as the arithmetic mean of the monthly values as follows: throughout the network, in each *i* month, for each type of (local, regional or medium-long distance) *s* service, the number of stations with adequate sales channels in relation to the total number of stations:

$$\%ACV_{s,t,i} = \left(\frac{\text{no. of stations with adequate sales channels}_{t,s,i}}{\text{total no. of stations}_{t,s,i}} \right) \cdot 100$$

3. For each station of the regional and local service, the sales channels (numerator) are deemed to be adequate when at least two sales channels are available, i.e. an online channel, as referred to under paragraph 4 (a) below, and a physical channel, as referred to under paragraph 4 (b), (c) and (d), or, as an alternative to the physical channel, when an on-board sales channel is available at no extra charge, as referred to under paragraph 4 (e). Where the relevant station is used for medium-long distance services,

the adequate supply is ensured where three sales channels are available. In particular, besides the identified sales channels, a call centre is provided, as referred to in paragraph 4 (f), that sells travel tickets exclusively for medium-long distance services.

The sales channels are relevant for the purpose of calculating the $\%ACV_{s,t,i}$ indicator only if they allow the ticket purchase for s service in i month.

4. The sales channels considered for the purpose of calculating the indicator are specified below:
 - (a) online sales channels (website, mobile website, APP);
 - (b) station ticket offices, open at least 5 days a week;
 - (c) fully operating ticket vending machines;
 - (d) approved sales outlets, provided they can be reached on foot safely and under normal conditions (existing sidewalks) covering a distance not exceeding 350 metres, and provided they are open on average no less than 6 days a week, subject to the closing periods for holidays that shall be duly indicated;
 - (e) on board at no extra charge;
 - (f) 24-hour call centre, 7 days a week.
5. The travel tickets covered by the PSC related to services subject to PSO are intended to be purchased via the sales channels referred to under paragraphs 4 (a), (b), (c), (d). The on-board purchase at no extra charge, as referred to in paragraph 4 (e), only applies to single tickets for services subject to PSO that are regulated under the PSC, without prejudice to the possibility for the AE to expand the type of travel tickets that may be purchased on board, including, for example, daily travel tickets.
6. The RU provides precise information on any authorised sales outlets, with indication of their opening days and hours, as provided for in Table 1, Measure 8.
7. With reference to paragraph 4 (f), any costs of the service shall be indicated in advance in a clear and transparent manner.
8. Regarding the online sales channels referred to in paragraph 4 (a), pursuant to Article 1 (167) of Law No 124 of 4 August 2017, the AEs are required to provide in the PSCs that the RU sets up and provides users with an online ticketing service through the website, without prejudice to the provision of the service by third parties pursuant to Measure 3 (12).
9. The ticket vending machines referred to in paragraph 4 (c) are considered to be fully operating only if all payment methods may be used, i.e. if banknotes, coins and credit/debit card payments are accepted.
10. The purchase of single tickets on board at no extra charge, as referred to under paragraph 4 (e), shall be ensured on the dates and at the times when the station ticket office, referred to in paragraph 4 (b) and any authorised sales outlets, as identified in paragraph 4 (d), are closed at the same time, both where the facility is not equipped with self-service ticket offices and where it is equipped so, but it is temporarily out of operation. Where the only available physical sales channel is the self-service referred to in paragraph 4 (c) and is temporarily out of operation, the RU shall ensure that single tickets may be purchased on board at no extra charge.
PRM shall be allowed to purchase a ticket on board at no extra charge where no accessible channel among those indicated in paragraphs 4 (b) and (c) is available in the station of departure.
11. Where in i month, for a certain station works are planned that prevent the use of usually available sales channels (e.g.: refurbishment of ticketing areas, replacement of self-service ticket machines), unusable channels, even for a limited period only, are excluded from the calculation of the indicator, except where, during the period in which they cannot be used, the RU provides for the operation of the channel referred to in paragraph 4 (e).

12. The annual minimum level of the %ACV indicator is 100%. The AEs may provide in the PSC that the minimum level of the %ACV indicator is reached gradually, in accordance with the arrangements identified in an action plan to be developed during the contract period, in order to take account of the territorial conditions of supply and demand. The conditions of demand include the stations/stops with low passenger numbers, as it can be assumed on the basis of origin-destination flow surveys, which are carried out by the AE. The conditions of supply include the size of the RU that is not proportionate to the volume of the investments in online ticketing systems to be developed in the short term, as certified by the AE. If the problems concern, in particular, one or certain types of stations referred to in paragraph 9 (b) of Measure 1, the deviation from the minimum level shall be identified by reference to the specific type of station. Only for the services carried out on the networks referred to in article 1 (2) (a) and (b) of Legislative Decree no. 112/2015, the minimum level of the %ACV indicator can be achieved gradually, according to the modalities indicated by the AE in each PSC, by specifying an *ad hoc* action plan to be developed during the contract period.
13. The MQR relating to paragraph 1 (b) is satisfied when there are no OTS interruptions exceeding 12 consecutive hours. It is measured by the indicator %BTEL, expressed as a percentage, calculated for each year as the arithmetic mean of the monthly values defined as follows: number of days in *i* month with adequate availability of online ticketing systems (e.g.: website, mobile website, APP, etc.), compared to the total number of days in *i* month. The availability of OTS is adequate if their operation is not interrupted for a period exceeding 12 consecutive hours.

$$\%BTEL_i = \left(\frac{\text{no. of days with adequate availability of OTS}_i}{\text{total no. of days}_i} \right) \cdot 100$$

The time required to carry out maintenance work on OTS is excluded.

14. The RU ensures that PRM may access the services provided by the online systems for ticket sales pursuant to Law No 4 of 9 January 2004, as updated by Ministerial Decree of 20 March 2013, as amended, which applies, *inter alia*, “to private companies holding public service concessions, municipally-owned regional companies, mainly publicly owned companies”.
15. **The annual minimum level of the indicator %BTEL is 100%.**
16. The MQR under paragraph 1 (c) is met when all TVM failures are remedied in less than a number of hours (n_{ss}) that is defined by the AE in accordance with the provisions of paragraph 18 below. The MQR is measured through the %BAUT indicator, expressed as a percentage, that is calculated for each year as the arithmetic mean of the monthly values as follows: for each *i* month, number of failures of available TVM in *t* stations (as identified under paragraph 9 of Measure 1) on the regional territory, that have been remedied in less than n_{ss} hours, as compared to the total number of failures in the month:

$$\%BAUT_i = \frac{\text{no. of TVM failures remedied in less than } n_{ss} \text{ hours}_{i,t}}{\text{total no. of TVM failures}_{i,t}} \cdot 100$$

17. The numerator includes the failures occurred in *i* month, including those remedied in *i* month and those solved within the first $n_{ss}/24$ days of the following month, provided that the remedial measure is carried out in a number of hours from failure detection which is less than n_{ss} as defined in the PSC. The failures occurred in *i* month that have been remedied in the first $n_{ss}/24$ days of the following month are included in the calculation of the *i*-month indicator and are excluded from that of the indicator of the following month.
18. The n_{ss} value is defined by the AE by considering the minimum annual arithmetic averages of TVM repair time in the last three years of operation. The value obtained can be reduced by the AE on the basis of

reasons that are related to location characteristics and equipment of the stations/stops where the TVM are located, as well as to the structure of repair procedures.

19. The time needed to restore the operation of TVM starts from the alert recording in the central system in the case of self-diagnosis systems, or from the reporting by the RU's personnel or AE's inspection staff, in the case of non-interconnected systems. In addition, failures due to vandalism are excluded from the cases of failure that are relevant for the calculation of the indicator and, for the purpose of calculating the time for troubleshooting, public holidays are not taken into consideration.
20. The **minimum annual levels of %BAUT indicator**, to be guaranteed for each type of t station, is 100%.
21. The MQR under paragraph 1 (d) is met when all ticket validating machines failures are remedied in less than a number of hours (n_{val}) that is defined by the AE in accordance with paragraph 23 below. The MQR is measured through the **%VAL** indicator, expressed as a percentage, that is calculated for each year as the arithmetic mean of the monthly values as follows: for each i month, number of failures of available ticket validating machines in t stations (as identified under paragraph 9 of Measure 1) on the regional territory, that have been remedied in less than n_{val} hours, as compared to the total number of failures in the month:

$$\%VAL_{i,t} = \frac{\text{no. of ticket validating machines failures remedied in less than no of } n_{val} \text{ hours}_{i,t}}{\text{total no. of ticket validating machines failures}_{i,t}} \cdot 100$$

22. The numerator includes the failures occurred in i month, including those remedied in i month and those solved within the first $n_{val}/24$ days of the following month, provided that the remedial measure is carried out in a number of hours from failure detection which is less than n_{val} as defined in the PSC. The failures occurred in i month that have been remedied in the first $n_{val}/24$ days of the following month are included in the calculation of the i -month indicator and are excluded from that of the indicator of the following month.
23. The value of n_{val} is defined by the AE by considering the minimum annual arithmetic averages of ticket validating machines repair time in the last three years of operation. The value obtained can be reduced by the AE on the basis of reasons that are related to location characteristics and equipment of the stations/stops where the ticket validating machines are located, as well as to the structure of repair procedures.
24. The time needed to restore the operation of ticket validating machines starts from the alert recording in the central system in the case of self-diagnosis systems, or from the reporting by the RU's personnel or AE's inspection staff, in the case of non-interconnected systems.
In addition, failures due to vandalism are excluded from the cases of failure that are relevant for the calculation of the indicator and, for the purpose of calculating the time for troubleshooting, public holidays are not taken into consideration.
In the event that all ticket validating machines of the facility are out of order, passengers shall board and request validation from the conductor and will not be sanctioned.
25. The **minimum annual level of %VAL indicator**, to be guaranteed for each type of t station, is 100 %.

Chapter V — Rolling stock cleaning and comfort

Measure 12 – Indicators and minimum levels of rolling stock cleaning and comfort

1. The minimum requirements of rolling stock cleaning are met when cleaning operations are carried out in a compliant manner, as measured through the following indicators:

Indicator 1 – PULT_EX Performance of scheduled cleaning cycles on rolling stock;

Indicator 2 – PULT_CF Compliance of cleaning cycles performed on rolling stock.

2. **Indicator 1 – PULT_EX** is defined with respect to the performance of a set of operations aimed at achieving a minimum level of cleanliness and décor, measured as follows.

$$PULT_EX = \left(\frac{\text{no. of performed operations}}{\text{no. of scheduled operations } p} \right) \cdot 100$$

in accordance with the targets set out in Table 4:

TABLE 4. Rolling stock cleaning: Classes of operation

Class of operation	Minimum frequency	Target	Minimum activities of reference	Subject
<i>A.1 – Short stop or on-board operation</i>	Variable, depending on necessity and stop times	A.1–A.2: Ensure restoring of acceptable cleaning conditions of toilets, floors and most used components, during the service	A.1–A.2: Waste removal and emptying of waste bins Toilet cleaning Water and sanitary fitting supply	All trains/services covered by the contract
<i>B - End-of-service operation</i>	Daily	Ensure dirt removal from toilets, floors and most used components, at the end of the service	Waste removal and emptying of waste bins Cleaning of toilets, floors and other most used components Water and sanitary fitting supply Sewage disposal	All trains/services covered by the contract
<i>C – Long stop operation</i>	Weekly	Ensure accurate cleaning of most used components during long stops	Accurate washing of toilets, floors, seats and other most used components	All trains/services covered by the contract
<i>D – Maintenance operation</i>	Half-yearly	Ensure restoring of best hygiene and decor of all rolling stock components during long stops or stops at maintenance facilities	Complete washing of all internal and external components Restoring and possible replacement of carriage components and furniture Disinfection, disinfestation and rodent control operations, as necessary Graffiti removal, as necessary	All trains/services covered by the contract

3. Operations are performed in **100%** of the cases and constitute the **MQR** of **PULT_EX** indicator for all actually operated commercial trains covered by the operating schedule.
4. **Indicator 2 – PULT_CF** is defined in relation to the number of compliant operations out of the total number of performed operations:

$$PULT_CF = \left(\frac{\text{no. of compliant operations}}{\text{no. of performed operations}} \right) \cdot 100$$

5. The compliance of the performed operations is ensured in **100%** of the cases for all actually operated commercial trains covered by the operating schedule and constitutes the **MQR** of **PULT_CF** indicator.
6. The minimum comfort requirements are met when the rolling stock equipment and features referred to by the following indicators are available:

Indicator 3 – %CLI_DT Air conditioning systems (cooling and heating);

Indicator 4 – %CLI_FN Operation of available air conditioning systems (cooling and heating);

Indicator 5 – %WC_DT Toilets;

Indicator 6 – %WC_AFN Toilet accessibility and operation.

7. **Indicator 3 – %CLI_DT** is defined in relation to the percentage of carriages equipped with air conditioning systems (heating and cooling) out of the total carriages of trains forming part of the rolling stock. It is a descriptive indicator with no associated MQR that is intended to provide an indicative value of the conditioning and heating systems of the rolling stock covered by the PSC and to monitor its evolution over time. It is calculated as the ratio of the carriages equipped with air-conditioning system to the total carriages of each train forming part of the rolling stock:

$$\%CLI_DT = \left(\frac{\text{no. of carriages equipped with air – conditioning system}}{\text{total no. of carriages}} \right) \cdot 100$$

8. **Indicator 4 – %CLI_FN** is defined in relation to the percentage of carriages that are equipped with a working air conditioning system (cooling and heating) for each actually operated commercial train covered by the operating schedule. It is calculated as the ratio of carriages with working air conditioning system to the total number of air-conditioned carriages of all operated trains:

$$\%CLI_FN = \left(\frac{\text{no. of carriages with working air conditioning system}}{\text{total no. of air – conditioned carriages}} \right) \cdot 100$$

9. Depending on the equipment of each train, the indicator will be calculated on a single air conditioning system with double hot/cold function or on each heating and air conditioning system.
10. The provision of working air conditioning systems (cooling and heating) is ensured in 100% of the cases for all actually operated commercial trains covered by the contract operating schedule and constitutes the MQR of the **indicator %CLI_FN**. With reference to medium-long distance trains only, the availability of a working air conditioning system is guaranteed, in addition to common passenger areas, also inside each carriage.
11. **Indicator 5 – %WC_DT** is defined in relation to the percentage of carriages that are equipped with toilet facilities out of the total carriages of the trains forming part of the rolling stock. It is a descriptive indicator with no associated MQR that is intended to provide an indicative value of the toilet facilities of the rolling stock covered by the PSC and to monitor its evolution over time. It is calculated as the ratio of the carriages equipped with toilets to the total carriages of each train forming part of the rolling stock:

$$\%WC_{DT} = \left(\frac{\text{no. of carriages with toilets}}{\text{total no. of carriages}} \right) \cdot 100$$

12. **Indicator 6 – %WC_AFN** is defined in relation to the percentage of accessible and functioning toilets for each actually operated commercial train covered by the operating schedule, that is calculated as the ratio of accessible and functioning toilets to the total available toilets of all operated trains:

$$\%WC_{AFN} = \left(\frac{\text{no. of accessible and operating toilets}}{\text{total no. of toilets}} \right) \cdot 100$$

13. The operation of toilet facilities is ensured in **100%** of the cases for all actually operated commercial trains covered by the contract operating schedule and constitutes the MQR of the **indicator %WC_AFN**.
14. The AE shall draw up a report, at least annually, that is transmitted to ART, concerning the equipment level for the indicators referred to in paragraphs 7 and 11.

Chapter VI — Public accessibility of rail services

Measure 13 – Indicators and minimum levels of accessibility

1. The minimum requirements of rolling stock accessibility are ensured through the obligation to:
 - (a) provide an Accessibility Operational Plan;
 - (b) plan an accessible and available service to users, including PRM;
 - (c) ensure a service that provides for the operation of side access doors and interchange of rolling stock;
 - (d) ensure a service that allows the transport of bicycles, including to facilitate intermodality.
2. The MQR under paragraph 1 (a) is measured with the binary indicator “**Existing Accessibility Operational Plan (P_ACC)**”, with 1, if the plan is adopted and 0, if it is not; this requirement is met by ensuring the following:
 - (a) the RU adopts the Plan no later than the first year of the conclusion of the contract;
 - (b) the RU prepares the Plan by involving at least AE, IM or SM, if any, consumer associations and passengers and PRM organisations representing their interests;
 - (c) the Plan provides for joint actions to improve the accessibility of the service, facilitate and coordinate the activities for the removal of architectural barriers and the compliance with the PRM Technical Specification for Interoperability (TSI), to be defined and agreed based on the respective responsibilities of the operators involved, and to be coordinated on the basis of concurrent action priorities, e.g. in accordance with the programme for removal of architectural barriers and elevated sidewalk drawn up by the IM or SM, if any. The Plan includes, but is not limited to, the following:
 - i. description of the accessibility level of the service on various L lines through the following indicator, which shows, depending on rolling stock equipment and journey schedule, the journey percentage that is accessible to PRM, as scheduled for each i month of service:

$$\%CORSEACC_{L,i} = \left(\frac{\text{no. of accessible scheduled monthly journeys}_{L,i}}{\text{no. of total scheduled monthly journeys}_{L,i}} \right) \cdot 100$$

where “accessible journey” means a journey that the relevant pictogram on the scheduled timetable indicates as usable also by PRM, in particular by wheelchair users;

- ii. target levels of the %CORSESACC_{L,i} indicator, to be achieved within the contractual term and identified by the RU and the AE based on the rolling stock investment programme;
 - iii. actions to improve the reception and assistance system for PRM in the case of services (journeys) identified by the operating schedule as accessible, but temporarily not accessible (e.g. actions by the RU in case of trains with a single low-floor carriage and no working doors);
 - iv. improvement of the reception and assistance system for PRM in case of replacement services as identified in the Action Plan;
 - v. practical guidance for the provision of printed and oral information at the station and on board, that is specific for PRM accessibility, as required by Measures 8 and 9;
 - vi. relevance of any new actions by the RU deriving from Regulation (EC) 1371/2007, as amended and supplemented;
- (d) upon consultation of the stakeholders concerned, as provided for in paragraph 5 of Measure 1, the AE may identify within the Plan specific clear, quantifiable and comparable objectives of monitoring and verification, through additional indicators with associated minimum quality levels, to ensure adequate homogeneous spreading of high levels of accessibility across all relations covered by the contract.
3. The **minimum level** of P_ACC indicator is 1 in case of adoption of the Plan no later than the first year from the conclusion of the contract. After the adoption of the Plan, the AE carries out inspections to assess the achievement of the objectives identified therein; the frequency of inspections also depends on the activities and timeframe to implement the measures provided for in the plan.
4. The MQR under paragraph 1 (b) is ensured by the planning of an adequate number of journeys operated by approved rolling stock that is accessible and available to PRM. The MQR is measured with the quantitative **indicator “Availability and usability of PRM services”, %SPMR**, that is calculated for each year as the arithmetic mean of monthly values as follows: for each *L* line, and each *i* month, monthly percentage of accessible journeys (including in relation to the use by wheelchair passengers), calculated as the ratio of the number of PRM-available monthly journeys to the total monthly journeys that are scheduled as accessible to PRM:

$$\%SPMR_{L,i} = \left(\frac{\text{no. of accessible and available monthly journeys}_{L,i}}{\text{no. of accessible scheduled monthly journeys}_{L,i}} \right) \cdot 100$$

where for each *L* line:

- a) the number of accessible and available monthly journeys is given by the number of scheduled monthly journeys with approved PRM-accessible rolling stock, which also ensures the use of trains by wheelchair passengers. In particular, for the purpose of the indicator, the journey is considered accessible if 100% of priority seats and wheelchair spaces has been found to be available and usable, and if 100% of foldable ramps, if available, has been found to be working and usable;
 - b) the number of accessible scheduled monthly journeys is the total number of the journeys indicated as accessible by the relevant pictogram in the operating schedule.
5. The annual **minimum level** of %SPMR indicator, to be guaranteed for each line is 100 %.
6. The MQR under paragraph 1 (c) is ensured by the operation of rolling stock with operating access and inter-unit doors. The MQR is measured with the quantitative indicator **“working access doors”, %PAF**, that is calculated for each year as the arithmetic mean of the monthly values defined as follows: for each *L* line, and for each *i* month, percentage of the journeys carried out with trains with operating side and inter-unit doors, calculated as the ratio of journeys with trains with operating doors to the total journeys made:

$$\%PAF_{L,i} = \left(\frac{\text{no. of journeys with trains with operating doors}_{L,i}}{\text{total no. of journeys made}} \right) \cdot 100$$

where, for each L line:

- a) the percentage calculation is made for all monthly trains;
 - b) train with operating doors means a train that has, at the same time, 100% of operating side doors and, if available, 100% of operating inter-unit doors.
7. The annual **minimum level** of %PAF indicator, to be guaranteed for each line, is equal to the average value over the last three-year operating period as annually updated in relation to a parameter that is determined by the AE also according to the rolling stock renewal plan provided for in the service contract.
 8. The MQR under paragraph 1 (d) is ensured by the planning of an adequate number of journeys operated with rolling stock on which the transport of complete (non-folding) bicycles is permitted. The MQR is measured with the quantitative **indicator “Availability of BIKE services”, %SBICI**, that is calculated for each year as the arithmetic mean of the monthly values defined as follows: for each L line, and for each i month, monthly percentage of the journeys where it is possible to carry bicycles, calculated as the ratio of the number of monthly journeys equipped for bicycle transport to the total monthly journeys:

$$\%SBICI_{L,i} = \left(\frac{\text{no. of monthly journeys equipped for bicycle transport}_{L,i}}{\text{total no. of monthly journeys}} \right) \cdot 100$$

where for each L line:

- a) the number of journeys equipped for bicycle transport is given the number of monthly journeys that are scheduled with rolling stock allowing users to travel with complete (non-folding) bicycles;
 - b) the number of total monthly journeys is given by the total scheduled journeys.
9. The **minimum annual level** of the %SBICI indicator, to be guaranteed for each line, is defined by the AE.
 10. In order to facilitate the movement of passengers accompanied by pets, the AE shall identify ways to ensure their accessibility on board.

Chapter VII — Travel and passenger safety

Measure 14 – Indicators and minimum levels of travel and passenger safety

1. The minimum requirement of “travel and passenger safety” is guaranteed through the obligation to adopt a “Safety and Control Operating Plan”.
2. The MQR under paragraph 1 is measured with the binary **P_SIC indicator**, which is 1, in the case of adoption of the Plan, and zero in case of non-adoption of the plan. The requirement is met by ensuring the following:
 - a) the RU shall adopt the Plan within the first year of the conclusion of the PSC;
 - b) the RU shall prepare the Plan with a planning horizon that is proportional to the contract duration and by involving at least the IM, the SM, law-enforcement bodies, persons responsible for maintenance, on-board and station staff, public relations staff;
 - c) the minimum content of the Plan includes joint actions towards:
 - i) setting up user awareness campaigns to promote correct behaviour;
 - ii) increase and specific training of station and travelling staff for passenger assistance;
 - iii) progressive increase in the technological rolling stock equipment to increase the safety level;
 - d) the Plan includes specific clear, quantifiable and comparable monitoring objectives, with reference to data that is already available to ANSF, Ministry of the Interior, RU, IM and SM and at least relating to:

- i) number of accidents due to improper user behavior of users, on-board and station personnel;
 - ii) progressive allocation and operation of rolling stock with acoustic devices for door opening and closing to be measured with appropriate indicators;
 - iii) change in the number of criminal events (acts of vandalism, theft, pickpocketing, robberies, disturbance and disorderly conduct) at the station and on board to be measured with appropriate indicators;
 - iv) progressive increase in the safety level and confidence perceived by the user in the different stages of the journey, with particular reference to off-peak time slots, to be measured through customer satisfaction surveys.
3. **The minimum level of the P_SIC indicator** is 1, in case of adoption of the 'Safety and Control Operating Plan' within the first year of the conclusion of the service contract in accordance with the contents and minimum objectives set out under paragraph 2 above.

Title III – QUALITY INDICATORS IN FRAMEWORK AGREEMENTS

Measure 15 – Quality indicators in Framework Agreements or Agreements other than the PSC

1. In compliance with the provisions of point 2.1 (last paragraph) and 2.2.7 of the Annex to Decision No 140/2017 of 30 November 2017, the AE agrees with the IM/SM on the additions to be adopted under Article 8 of the "Framework Agreement for local public transport services" (Annex 3 to Section 2 of NS) or other legally binding agreements regulating the relationship with the IM/SM, in order to provide for the supply of the services specified in the following paragraphs, in all the stations covered by the PCSs within its remit.
2. For each of the services specified in the following paragraphs, the AE lays down together with the relevant IM/SM:
 - a) modalities of verification and monitoring, by defining one or more numerical or binary quality indicators, their calculation methods and timing, related responsibilities for their performance;
 - b) minimum levels to be reached and maintained for each quality indicator;
 - c) system of penalties aimed at ensuring, throughout the duration of the PSC, compliance with the established minimum levels.

The AE shall define the above items in line with the criteria adopted for the identification of the minimum quality requirements for the services referred to under Title I above.

The monitoring of the indicators can also be carried out by conducting sample inspections of the stations concerned, on the basis of appropriate evaluation checklists agreed with the IM/SM, that are carried out by the AE including through a specially appointed company.

3. In order to ensure minimum requirements of transparency in the way services are provided and to promote their development, the AE and the relevant IM/SM shall publish on their web portals the following information for each of the services specified below:
 - a) indicators, their calculation methods/timing and minimum quality levels;
 - b) final values reached by each indicator, according to the relevant timing of the monitoring;
 - c) any contractual penalties paid to the AE, broken down by indicator.
4. In compliance with the provisions of paragraph 10.6 of Measure 10 of the Annex to ART's Decision no. 70 of 31 October 2014 and of the Access Contracts concluded between RU and IM/SM (Annexes 1 and 2 to Section 5 of NS), the AE, by appropriately involving the RUs concerned, shall identify the information to be provided to users and citizens inside the station, with respect to infrastructure equipment and availability of space; this information shall be:
 - a) differentiated by communication/disseminating channel and by type (static and dynamic);
 - b) disseminated in a plain language for users (including PRM), and occasional users, and for the general public, without using technical terms;
 - c) in case of non-spoken information, supplied and placed so as to ensure maximum readability for font size and use of colour;
 - d) in case of spoken information (sound announcements), comprehensible in terms of pronunciation and appropriate sound level.

In accordance with paragraph 2 above, the AE shall define quality indicators differentiated by type of information and communication channel and monitor them in relation to findings of the inspections concerning any situations that can be found inside the station, such as: availability of appropriate space for notice posting, lack of information, illegibility, incompleteness, late provision, failure to update, non-compliant positioning, effective operation of services and/or station equipment or other cases as predetermined by the AE.

5. In compliance with the provisions of the Access Contracts concluded between RU and IM/SM (Annexes 1 and 2 to Section 5 of NS), the AE shall identify the minimum requirements of cleanliness and comfort to be provided inside the station areas open to the public, by establishing actions to be taken, modalities and frequency of their performance and related objectives, with particular reference to:
- cleaning, decor and lighting of the areas open to the public and their furnishings (e.g.: waiting rooms, information spaces, ticketing areas, toilets);
 - accessible and working toilet facilities (including water supply and hygienic accessories);
 - operation of heating and air-conditioning systems of waiting rooms and toilets, where available.

The AE shall monitor the quality indicators referred to in paragraph 2 above, concerning the recording of planned interventions and the outcome of inspections on actual decor, cleanliness and comfort compared to the expected objectives.

6. In accordance with Article 21 of Regulation (EC) No 1371/2007, the AE shall identify the minimum requirements to be met so as to allow autonomous access to stations for all users and citizens, including PRM; for this purpose, the TSI requirements (see Measure 13 above) shall be complied with by allowing PRM to have full autonomous access to the service without having to request assistance services (e.g.: the platform height allows access to the rolling stock without using special lifts and there are no architectural barriers both to platform access and along pedestrian transfer routes, including from/to other rail-integrated transport services). The above accessibility characteristics are identified by the indicator “**Stations with autonomous PRM access**”, %AAPMR.

7. The quantitative indicator %AAPMR is defined as follows: for each L line, percentage of stations providing autonomous access to PRM, that is defined as the ratio of stations where persons with reduced mobility can access services in total autonomy without having to request specific assistance, to the total number of stations:

$$\%AAPMR_L = \left(\frac{\text{no. of stations with autonomous access } PMR_L}{\text{total no. of stations}} \right) \cdot 100$$

where for each L line:

- the percentage calculation is carried out by considering all the stations on L line;
- station with autonomous PRM access means a station where all TSI requirements are met, and where a PRM user can access the service in full autonomy without having to request an assistance service (e.g. the platform height allows access to the rolling stock without using special lifts and there are no architectural barriers both to platform access and along pedestrian transfer routes, including from/to other rail-integrated transport services).

The AE shall monitor the quality indicators referred to in paragraph 2 above, in relation to the outcome of the inspections on the actual accessibility of the stations concerned, e.g. operating and unobstructed ramps, undamaged tactile paths, adequate signalling systems of PRM-dedicated paths.

8. In compliance with the provisions of Article 22 of Regulation (EC) No 1371/2007 and paragraph 9.6 of Measure 9 of the Annex to Decision no. 70 of 31 October 2014, the AE shall identify the requirements to be met for an adequate assistance service to PRM, with particular reference to the arrangements and timing of the request for assistance in the boarding, alighting or transfer from/between trains, through appropriate equipment and station staff and the level of deployment of these services in all stations through the indicator “**Stations with PRM assistance services**”, %APMR.

9. The quantitative %APMR indicator is defined as follows: for each L line, percentage of stations with PRM service, calculated as the ratio of the stations for which assistance for PRM services can be requested to the total number of stations:

$$\%APMR_L = \left(\frac{\text{no. of stations with PRM services}_L}{\text{total number of stations}_L} \right) \cdot 100$$

where for each *L* line:

- a) the percentage calculation is carried out by considering all the stations, including intermediate stations, on *L* line;
- b) station with PRM service means a station for which it is possible to request PRM assistance, in particular for the boarding, alighting or transfer from/between trains, through appropriate equipment and assistance personnel.

The AE shall monitor the quality indicators referred to in paragraph 2 above, in relation to the outcome of the inspections on the actual availability of the supplied services, e.g. in terms of compliance with modalities/timing of request, staff efficiency and equipment operation, including in relation to the different needs of potentially concerned PRM categories.

10. The **minimum levels** of %APMR and %AAPMR indicators and the assessment periods are defined by the AE according to the investment plan and the TSI adjustment programmes prepared by the IM.

11. The AE shall identify the minimum passenger safety requirements inside the station in line with any planned/implemented actions within the framework of the “Programme Contract – Services” defined by the IM and the State; for this purpose, the AE shall plan specific activities such as user awareness campaigns to promote correct behaviour, training of station staff for passenger assistance.

The AE shall monitor the quality indicators referred to in paragraph 2 above in relation to the reduction in the number of events due to incorrect behaviour of station staff (e.g.: prevention and management of hazard/emergency situations on platforms) and/or users (e.g.: boarding/alighting from train in motion, non-compliance with safety distances on platforms, undue presence in railway station) and/or in relation to the reduction in the number of criminal events at the station (e.g.: acts of vandalism, theft, pickpocketing, robberies, disturbance and disorderly conduct) on the basis of a specific report agreed upon with the IM/SM concerned, by appropriately involving other competent parties (e.g.: railway police or other law-enforcement bodies), within the framework of the existing cooperation between IM/SM, RU and competent bodies.

Annex — List of indicators included in the regulatory measures

Measure 6

CONF: Compliance of rolling stock with the operating schedule

Measure 7

%Rt_t : Service regularity

%OS₍₀₋₅₎: **Train timetable deviation (0'-5')**

%OSC₍₀₋₅₎: **Total train timetable deviation (0'-5')** (descriptive indicator not included in MQRs)

%OS_{ML(0-15)}: **Train timetable deviation (0'-15')**

%OSC_{ML(0-15)}: **Total train timetable deviation (0'-15')** (descriptive indicator not included in MQRs)

Measure 8

INFO_AN: Pre-journey information

Measure 9

INFO_DU: Information during the journey

Measure 10

P_INF: Publication of the information

Measure 11

%ACV: Accessibility sales channels

%BTEL: Online ticketing system operation

%BAUT: Automatic ticket vending machine operation

%VAL: Ticket validating machine operation

Measure 12

PULT_EX: Performance of scheduled cleaning cycles on rolling stock

PULT_CF: Compliance of cleaning cycles performed on rolling stock

%CLI_DT: Air conditioning systems (descriptive indicator not included in MQRs)

%CLI_FN: Operation of air conditioning systems (descriptive indicator not included in MQRs)

%WC_DT: Toilets (descriptive indicator not included in MQRs)

%WC_AFN: Toilet accessibility and operation.

Measure 13

P_ACC: Existing Accessibility Operational Plan

%CORSEACC: PRM-accessible scheduled journeys (indicator with identification of minimum level by the AE)

%SPMR: Journeys with accessible/available rolling stock

%PAF: Working access doors

%SBICI: Journeys with bicycle transport

Measure 14

P_SIC: Safety and Control Operating Plan

Measure 15

%AAPMR: Stations with autonomous access (indicator with identification of the minimum level by the AE)

%APMR: Stations with PRM assistance services (indicator with identification of minimum level by the AE)