

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

EXHIBIT III - OPERATIONAL AND MAINTENANCE PLAN

EXHIBIT III.A – OPERATIONAL AND MAINTENANCE GUIDELINES

**PART I
OPERATIONAL GUIDELINES**

**PART II
MAINTENANCE GUIDELINES**

INDEX

OBJECTIVE	3
PART I - OPERATIONAL GUIDELINES	4
1. GENERAL GUIDELINES	4
2. OPERATIONAL PLANS	4
3. PROVISION OF SERVICES	7
4. RIGHT OF TRAVEL.....	7
5. HOURS OF OPERATION, INTEGRATION AND TRANSFER OF SERVICES	9
6. OPERATING CONDITIONS OF THE SERVICES	12
7. SEAT AVAILABILITY PLAN.....	20
8. OPERATIONAL MANAGEMENT	27
9. INTERRELATIONSHIP WITH OTHER TRANSPORT SYSTEMS.....	30
10. MOVEMENT OF TRAINS.....	31
11. SAFETY CONDITIONS	32
12. MEDICAL CARE AND FIRST AID.....	33
13. OF THE SECURITY CORPS	34
14. MONITORING, PREVENTION AND CONTAINMENT PLAN FOR REVENUE EVASION	35
15. SERVICE TO THE PUBLIC.....	38
16. COMPLEMENTARY SERVICES	39
17. CLEANING CONDITIONS.....	40
18. CONDITIONS OF COMFORT AND CONVENIENCE FOR PASSENGERS	40
PART II - MAINTENANCE GUIDELINES	41
1. GENERAL GUIDELINES:	41
2. MAINTENANCE IN THE PRE-OPERATIONAL PHASE	41
3. MAINTENANCE PLAN	46
4. MAINTENANCE LEVELS	48
5. PREVENTIVE MAINTENANCE.....	48
6. CORRECTIVE MAINTENANCE.....	49
7. PREDICTIVE MAINTENANCE.....	49
8. EVOLUTIONARY MAINTENANCE	49
9. ENGINEERING PERFORMANCE REPORT	49
10. INSPECTION AND TERMINATION OF THE CONCESSION	50

**SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ**

OBJECTIVE

This EXHIBIT establishes the mandatory guidelines for the operation and maintenance of the concession of the LINES, applicable to the services of the three LINES, to the AIRPORT EXPRESS SERVICE, which are formulated in minimum requirements, to ensure the provision of the ADEQUATE SERVICE, without inhibiting the CONCESSIONAIRE from contributing its experience and technology to the benefit of the quality offered to the PASSENGER.

In case of non-compliance with the mandatory guidelines established in this EXHIBIT, the provisions provided for in EXHIBITS III.D and V will also be applied.

PART I - OPERATIONAL GUIDELINES

1. GENERAL GUIDELINES

- 1.1. This EXHIBIT presents the mandatory operational guidelines that must be followed by the CONCESSIONAIRE for faithful compliance with the AGREEMENT.
- 1.2. The mandatory operational guidelines may be changed at the request of the CONCESSIONAIRE, upon prior APPROVAL by the INDEPENDENT AUDITOR and issuance of no objection by ARTESP, containing the justifications for the amendment and the exposure of the guidelines sought by the CONCESSIONAIRE.
 - 1.2.1. The above request must prove compatibility with the functionality and safety of the operation of the SERVICE, as well as the non-impairment or compromise of compliance with the PERFORMANCE INDICATORS.
 - 1.2.2. The CONCESSIONAIRE shall bear all costs and financial impacts, positive and negative, resulting from changes in mandatory operational guidelines requested and not objected to by ARTESP, pursuant to item 1.2.
 - 1.2.3. The non-objection of ARTESP to the changes requested by the CONCESSIONAIRE of the mandatory operational guidelines does not give rise to any liability to ARTESP or the GRANTING AUTHORITY, nor does it change the allocation of risks originally established in the CONTRACT, and the CONCESSIONAIRE remains fully responsible for the obligations arising from the CONTRACT and its EXHIBITS, including any imperfections or defects in the projects or the quality of the services performed.
 - 1.2.4. ARTESP may, in its judgment of convenience and opportunity, in the light of the public interest, deny the change requested by the CONCESSIONAIRE, without this denial resulting in any right to indemnification, rebalancing or compensation to the CONCESSIONAIRE, which will remain subject to the mandatory operational guidelines contained in this EXHIBIT and/or in force.
- 1.3. In the event of a change in the mandatory operational guidelines by unilateral determination of ARTESP or the GRANTING AUTHORITY, the allocation of risks of the CONTRACT will be observed, in order to determine the need for any economic and financial rebalancing.
 - 1.3.1. The CONCESSIONAIRE will not be entitled to the rebalancing when the unilateral determination, by ARTESP or by the GRANTING AUTHORITY, aiming at changing the mandatory operational guidelines, results from a fact attributable to the CONCESSIONAIRE or from an event whose risk is contractually allocated to it.

2. OPERATIONAL PLANS

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

- 2.1. Based on the mandatory operational guidelines, the CONCESSIONAIRE will prepare the OPERATIONAL PLANS, always aiming at the provision of the ADEQUATE SERVICE, and will be subject to the discipline provided for in Clause seven of the CONTRACT. Such guidelines must be adopted in the operation of the SERVICES, in a normal or contingency situation, depending on the technical and constructive characteristics of the systems, equipment and facilities.
- 2.2. The non-objection of ARTESP to the OPERATIONAL PLANS does not give rise to any liability to it, nor does it change the allocation of risks originally established in the CONTRACT, and the CONCESSIONAIRE remains fully responsible for the obligations arising from the CONTRACT and its EXHIBITS, including any imperfections or defects in the projects or the quality of the services performed.
- 2.3. The OPERATIONAL PLANS must provide for compliance with all mandatory guidelines present in this EXHIBIT and, at least, contain the following plans:
 - 2.3.1. SEAT AVAILABILITY PLAN, in which the CONCESSIONAIRE shall describe the methods and strategies to be adopted to ensure the adequate transportation of PASSENGERS, subject to the provisions of item **Erro! Fonte de referência não encontrada.** of this EXHIBIT;
 - 2.3.2. PASSENGER SERVICE PLAN, which the CONCESSIONAIRE shall establish, subject to the provisions of items 15 and 16 of this EXHIBIT:
 - 2.3.2.1. Procedures for serving USERS and PASSENGERS at stations and bike racks, including procedures for serving people with reduced mobility, the visually impaired, pregnant women and others;
 - 2.3.2.2. Communication actions referring to any occurrence or incident that may cause inconvenience to USERS and PASSENGERS; and
 - 2.3.2.3. Procedures for assistance in the event of an accident with PASSENGERS and employees, or with sudden illness that, in the CONCESSION AREA, require outpatient and pre-hospital care, and, when necessary, hospital removal directed to public health agencies, as well as an updated control mechanism for the registration and attendance of all occurrences.
 - 2.3.3. OPERATIONAL SAFETY PLAN:
 - 2.3.3.1. In this plan, the CONCESSIONAIRE shall:
 - 2.3.3.1.1. Establish methods and strategies that ensure a safe OPERATION for PASSENGERS, passers-by, employees and collaborators

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

under the terms of the CONTRACT and its EXHIBITS and other applicable laws, regulations and standards;

2.3.3.1.2. Discipline the operational and property safety of employees and third parties, detailing resources involved (team, qualification, hierarchy, equipment, facilities), modes of operation, area of coverage, procedural framework, competencies and responsibilities, in normal and exceptional situations; and

2.3.3.1.3. Establish:

- i. Instruction for the development, approval and monitoring of preventive and corrective actions for risk situations;
- ii. Training program for employees and agents directly involved with security issues; and
- iii. Training program for employees and agents directly involved in accessibility for people with disabilities, under the terms of regulations in force.

2.3.4. RISK AND CONTINGENCY MANAGEMENT PLAN, in which the methods and strategies for managing risks and contingencies related to the CONCESSION must be described;

2.3.5. INSURANCE PLAN, in which all the insurances to be contracted and maintained by the CONCESSIONAIRE for the provision of the SERVICES must be described, including, at least, the mandatory insurances required in Clause 52 of the CONTRACT; and

2.3.6. MONITORING, PREVENTION AND CONTAINMENT PLAN FOR REVENUE EVASION, in which the CONCESSIONAIRE shall indicate the operational procedures that will be adopted to mitigate the risk of evasion of the payment of the PUBLIC FARE on the LINES, observing the provisions of item 14 of this EXHIBIT.

2.4. The OPERATIONAL PLANS shall be prepared, in their first version, within six (6) months of the beginning of the PRE-OPERATIONAL PHASE, to guide the conduct of the CONCESSIONAIRE throughout the CONCESSION period.

2.5. Before the end of the PRE-OPERATIONAL PHASE, the CONCESSIONAIRE must have the APPROVAL of the INDEPENDENT AUDITOR and the non-objection of ARTESP for all the plans that make up the OPERATIONAL PLANS.

2.5.1. The procedure for approval of the OPERATIONAL PLANS and deadlines involved are

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

established in the seventh clause of the CONTRACT.

2.5.2. In case of disagreement between the CONCESSIONAIRE and ARTESP regarding the content of the OPERATIONAL PLANS, the dispute resolution mechanisms provided for in the CONTRACT may be activated.

2.6. ARTESP, by its own means or by third parties designated by it, will carry out auditing and inspection actions of compliance with the OPERATIONAL PLANS.

2.6.1. It will be the responsibility of the INDEPENDENT VERIFIER to monitor and evaluate the goals and desired results, provided for in each plan.

3. PROVISION OF SERVICES

3.1. The SERVICES will be provided allowing access to other lines of the METRO-RAILWAY SYSTEM or to other urban public transport systems (monorail, subway, bus) through stations or terminals of physical-fare integration.

3.2. The provision of SERVICES must ensure quality service, ensuring the safety of people and facilities.

3.3. The capacity of the SERVICES must respond to the growth in demand and ensure the ADEQUATE SERVICE, observing the requirements of the CONTRACT, its EXHIBITS, especially this EXHIBIT, as well as the SEAT AVAILABILITY PLAN and the other documents that are part of the OPERATIONAL PLANS.

4. RIGHT OF TRAVEL

4.1. Services of LINHAS and AIRPORT EXPRESS:

4.1.1. Every passenger holding a valid TRAVEL DOCUMENT will be entitled to the trip, and must be allowed access to the paid area of the stations.

4.1.2. The CONCESSIONAIRE shall guarantee access and transportation to those who have the legal right to free transportation, properly identified, as set forth in EXHIBITS III.E and X.

4.1.3. The CONCESSIONAIRE, through the control and access system to the station, under the terms of the CONTRACT and EXHIBIT X, shall provide ARTESP with information regarding the count of the number of passengers who have accessed the stations and made the transfers.

4.1.4. In the event of the seizure of a false TRAVEL PERMIT, as provided for in EXHIBIT III.E,

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

the CONCESSIONAIRE will take the appropriate legal measures against the bearer. Such a guideline must also be contained in the OPERATIONAL PLANS.

- 4.1.5. The CONCESSIONAIRE shall adopt all measures to prevent the practice of any conduct by the PASSENGERS contrary to the duty to pay the PUBLIC FARE, when such payment is required, including verifying the authenticity of documents proving the status of beneficiary of gratuity or fare reduction.
- 4.1.6. The CONCESSIONAIRE shall allow access, for work to be carried out on its premises, to its employees, outsourced workers, service providers, as well as employees of CPTM, METRÔ, ARTESP, the GRANTING AUTHORITY and employees responsible for the activities assigned to the TECHNICAL SUPPORT, INDEPENDENT AUDITOR and INDEPENDENT VERIFIER when carrying out their activities.
 - 4.1.6.1. Those who access the paid areas of the stations in the form of the item 4.1.6 will not be counted as TRANSPORTED PASSENGERS, and the CONCESSIONAIRE must establish an operating procedure compatible with this condition, also considering other requests from ARTESP, whether for new providers or replacement of current ones.
- 4.1.7. When, for any reason, there is an interruption of the service in the circulation of trains (even partial), the CONCESSIONAIRE must pay for the return of the TRAVEL PERMIT to the PASSENGERS. The refund, in any case, will be upon delivery of a single TRAVEL PERMIT or equivalent credit, by the CONCESSIONAIRE, as provided for in EXHIBIT X.
- 4.1.8. The CONCESSIONAIRE shall develop operational procedures for monitoring and controlling the use, by the PASSENGER, of the tickets/gratuity cards/services instituted by the GRANTING AUTHORITY, pursuant to Laws and Resolutions of the competent State Secretariat, as well as for monitoring and controlling the use, by the CONCESSIONAIRE, of ACCESS RELEASE CARDS, for the use of the SERVICES indicated in item 4.1, and such operational procedures must be presented to ARTESP, together with the OPERATIONAL PLAN, following the same rite of deadlines and conditions for non-objection. The use of SERVICE CARDS carried by CPTM and METRÔ employees must also be covered in these operational procedures.
- 4.1.9. In case of operational need, such as operational or maintenance emergencies, scheduled interruption of OPERATION services, linked to interfaces in the execution of works or for testing, the CONCESSIONAIRE shall use PAESE, as an alternative to the continuation of the PASSENGERS' trip, under the terms of the CONTRACT and EXHIBIT III.C.
 - 4.1.9.1. The costs of using the PAESE are the responsibility of the CONCESSIONAIRE, when called upon by it. In the event that the activation results from a request

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

by third parties, they will bear the costs, including when arising from the MRS AGREEMENT x CPTM.

- 4.1.10. The travel document that cannot be identified by the equipment or other means existing for this purpose shall be considered worthless, under the terms of EXHIBITS III.E and X.
- 4.1.11. The CONCESSIONAIRE shall operate all the equipment under its responsibility existing in the interface areas with the transport operators or other concessionaires with physical integration, keeping its operation under control and providing information to the respective transport operators and concessionaires about abnormal operating situations, for which they may be the subject of consultations by PASSENGERS, media or other interested parties.
- 4.1.12. The CONCESSIONAIRE may also be called upon to respond to emergencies of other associated transport companies, however, it must be reimbursed by the requester itself.

5. HOURS OF OPERATION, INTEGRATION AND TRANSFER OF SERVICES

- 5.1. The CONCESSIONAIRE shall keep the services of the LINES and the AIRPORT EXPRESS SERVICE open to the public from 4:00 a.m. to 12:00 a.m. every day, and may, at the discretion of ARTESP, extend the SERVICES until 1:00 a.m. on Sundays, where:
 - 5.1.1. The circulation of trains in operation must consider the stop of trains at all stations open to the public.
 - 5.1.2. The CONCESSIONAIRE all keep information regarding the operating hours of the train service in a place visible to the public.
 - 5.1.3. The stations will be open to the public for boarding from 4 am until the last scheduled departure time.
 - 5.1.4. The stations will be open to the public for disembarkation from 4 am until the arrival of the last scheduled train time.
 - 5.1.5. At the transfer stations, the transfer will not take place outside the operating limit hours of the respective integrated lines.
- 5.2. The CONCESSIONAIRE shall keep the AIRPORT EXPRESS SERVICE open to the public on a daily basis from 4:00 a.m. to 12:00 a.m. every day, establishing the program adhering to the provisions of this EXHIBIT, to the needs of the demand and compatible with the operational schedules of the METRO-RAIL SYSTEM for the purpose of integration.

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

- 5.3. The CONCESSIONAIRE shall establish special operating hours to serve, in the municipalities covered by the passenger system of the LINES, considering all the services that operate on these lines and the AIRPORT EXPRESS SERVICE, events that generate high demand, such as: large sports events, *concerts*, festivals, religious events, parades and others that may provide an increase in demand due to the concentrated flow of people, whether scheduled or occasional, as well as when special schedules are established by CPTM or established by the GRANTING AUTHORITY or ARTESP, resulting from similar situations, subject to the provisions of the CONTRACT.
- 5.4. Currently, transfers between the LINES or the AIRPORT EXPRESS services and the subway line services are free, except at the Tatuapé and Corinthians-Itaquera stations from 4 am to 10 am and from 5 pm to 8 pm on weekdays. Transfers between LINES services and services on other railway lines are also free of charge.
- 5.5. The existing and future metro-rail integrations in the stations that are or will be served by the LINES and the AIRPORT EXPRESS SERVICE are presented in the following table.

Table 1 - Existing and future metro rail integrations

STATION	SITUATION	SERVICE IN THE CONCESSION	METRO-RAIL INTEGRATIONS
Palmeiras-Barra Funda	Existing station	LINE 11 AIRPORT EXPRESS	Subway lines: - 3-Vermelha Railway lines: - 7-Rubi - 8-Diamante - ICT Eixo Norte (future)
Bom Retiro	Mandatory investment	LINE 11	Railway lines: - 10-Turquesa
Luz	Existing station	LINE 11 AIRPORT EXPRESS	Subway lines: - 1-Azul - 4- Amarela Railway lines: - Service 710 (will be discontinued after expansion of LINE 11 to Palmeiras-Barra Funda) - 10-Turquesa (as soon as 710 service is discontinued)
Pari	Contingent investment	LINE 11	Subway lines: - 19-Celeste (future) Railway lines: - 10-Turquesa
Brás	Existing station	LINE 11 LINE 12 AIRPORT EXPRESS	Subway lines: - 3-Vermelha Railway lines:

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

STATION	SITUATION	SERVICE IN THE CONCESSION	METRO-RAIL INTEGRATIONS
			- Service 710 (will be discontinued after expansion of LINE 11 to Palmeiras-Barra Funda) - 10-Turquesa
Tatuapé	Existing station	LINE 11 LINE 12	Subway lines: - 3-Vermelha
Penha	Investment by Metrô-SP	LINE 11	Subway lines: - 2-Verde - 3-Vermelha
Corinthians-Itaquera	Existing station	LINE 11	Subway lines: - 3-Vermelha Railway lines: - 14-Onyx (Future)
Don Bosco	Existing station	LINE 11	No
José Bonifácio	Existing station	LINE 11	No
Guaianases	Existing station	LINE 11	No
Lajeado	Mandatory investment	LINE 11	No
Antônio Gianetti Neto	Existing station	LINE 11	No
Ferraz de Vasconcelos	Existing station	LINE 11	No
Poá	Existing station	LINE 11	No
Calmon Viana	Existing station	LINE 11 LINE 12	No
Suzano	Existing station	LINE 11 LINE 12 (future)	No
Jundiapéba	Existing station	LINE 11	No
Braz Cubas	Existing station	LINE 11	No
Mogi das Cruzes	Existing station	LINE 11	No
Estudantes	Existing station	LINE 11	No
Cezar de Souza	Mandatory investment	LINE 11	No
Gabriela Mistral	Investment by Metrô-SP	LINE 12 LINE 13 AIRPORT EXPRESS	Subway lines: - 2-Verde (future)
Cangaíba	Mandatory investment	LINE 12 LINE 13	No
Engenheiro Goulart	Existing station	LINE 12 LINE 13	No
USP Leste	Existing station	LINE 12	No
Comendador Ermelino	Existing station	LINE 12	No
União da Vila Nova	Contingent investment	LINE 12	No
São Miguel Paulista	Existing station	LINE 12	Railway lines: - 14-Onyx (Future)
Jardim Helena-Vila Mara	Existing station	LINE 12	No
Itaim Paulista	Existing station	LINE 12	No

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

STATION	SITUATION	SERVICE IN THE CONCESSION	METRO-RAIL INTEGRATIONS
Jardim Romano	Existing station	LINE 12	No
Engenheiro Manoel Feio	Existing station	LINE 12	No
Itaquaquecetuba	Existing station	LINE 12	No
Aracaré	Existing station	LINE 12	No
Guarulhos-CECAP	Existing station	LINE 13 AIRPORT EXPRESS	No
Airport-Guarulhos	Existing station	LINE 13 AIRPORT EXPRESS	No
Jardim dos Eucaliptos	Mandatory investment	LINE 13	No
São João	Mandatory investment	LINE 13	No
Presidente Dutra Garden	Mandatory investment	LINE 13	No
Bonsucesso	Mandatory investment	LINE 13	Railway lines: - 14-Onyx (Future)

6. OPERATING CONDITIONS OF THE SERVICES

6.1. The CONCESSIONAIRE shall take the necessary measures to maintain the SERVICES in accordance with its SEAT AVAILABILITY PLAN, especially as to its regularity and continuity.

6.1.1. The SERVICES must be operated with minimization of transshipments or transfer of PASSENGERS, and the trains must, whenever possible, be operated continuously on all trips that the frequency of schedules allows, and the PASSENGERS must be clearly communicated before boarding, on each trip, which is the final service station.

6.1.1.1. The configuration of the SERVICES must be consistent with the existing Ticketing System to allow for adequate fare collection.

6.2. INTERVAL BETWEEN TRAINS ON THE LINE SERVICES AND ON THE AIRPORT EXPRESS

6.2.1. The schedule of the intervals between trips in the SERVICES offered on each line must observe the goals established in the tables below, for PEAK PERIODS and VALLEY PERIODS.

Table 2 – Maximum intervals established for the SERVICES between the 1st and 8th year of the CONCESSION (in minutes)

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

Service	Stretch	Working days		Saturdays		Sundays and Holidays
		Maximum intervals not PEAK PERIOD	Maximum intervals in the VALLEY PERIOD	Maximum intervals not PEAK PERIOD	Maximum intervals in the VALLEY PERIOD	Maximum intervals throughout the day
Line 11	Palmeiras-Barra Funda – Guaianases	3,5	5,5	5,5	11	30
	Guaianases – Estudantes	7	11	11	11	30
Line 12	Brás – Itaquaquetuba	5	8	8	8	30
	Itaquaquetuba – Calmon Viana	10	8	8	8	8
Line 13	Eng. Goulart – Airport-Guarulhos	15	15	15	15	20
Airport Express	Palmeiras-Barra Funda – Airport-Guarulhos	60	60	60	60	60

Table 3 – Maximum intervals established for the SERVICES from the 9th year of the CONCESSION (in minutes)

Service	Stretch	Working days		Saturday		Sundays and Holidays
		Maximum intervals not PEAK PERIOD	Maximum intervals in the VALLEY PERIOD	Maximum intervals not PEAK PERIOD	Maximum intervals in the VALLEY PERIOD	Maximum intervals throughout the day
Line 11	Palmeiras-Barra Funda – Suzano	3	4,5	4,5	9	15
	Suzano – Cezar de Souza	6	9	9	9	15
Line 12	Brás – Itaquaquetuba	3,25	8	8	8	15
	Itaquaquetuba – Suzano	6,5	8	8	8	15
Line 13	Gabriela Mistral – Bonsucesso	10	15	15	15	20
Airport Express	Palmeiras-Barra Funda – Airport-Guarulhos	60	30	30	30	30

6.2.1.1. Until the 8th year of the CONCESSION, the intervals obtained by CPTM in the REFERENTIAL PERFORMANCE INDICATORS in their respective SERVICES apply, as provided for in the Table 2 above and in the system established in EXHIBIT III.D. After the 8th year of the CONCESSION, the provisions of the Table 3 above.

6.2.1.2. Intervals shorter than those set forth in the tables above may be required by the CONCESSIONAIRE in the preparation of its SEAT AVAILABILITY PLAN, provided that there is sufficient demand to justify the proposed intervals and the minimum capacity of 2 PASSENGERS/m² is respected, under the terms of item 6.3.3 of this EXHIBIT, with APPROVAL by the INDEPENDENT VERIFIER and no objection by ARTESP.

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

- 6.2.1.3. The SEAT AVAILABILITY PLAN may provide for other configurations for SERVICES on each of the LINES, upon APPROVAL by the INDEPENDENT VERIFIER and no objection by ARTESP, provided that the proposed reconfigurations contemplate at least one SERVICE in all stations of a given LINE without transfers.
- 6.2.1.4. Any proposal for changes in the SEAT AVAILABILITY PLAN must be submitted to ARTESP for evaluation and must be approved by ARTESP before its implementation by the CONCESSIONAIRE.
- 6.2.1.5. When proposing a new configuration for the SERVICES, the CONCESSIONAIRE must take into account compliance with the PERFORMANCE INDICATORS established in EXHIBIT III.D.
- 6.2.2. The goals established in the item's tables 6.2.1 shall be reassessed by ARTESP annually, in order to ascertain whether the limits and parameters established are compatible with the charging observed and informed monthly by the CONCESSIONAIRE.
 - 6.2.2.1. If the goals established in the tables of the item 6.2.1 in PEAK PERIODS result in an average monthly capacity over the last 12 (twelve) months of less than 5.0 PASSENGERS/m² or more than 6.0 PASSENGERS/m² in the CRITICAL SECTION, these goals may be redefined by ARTESP, in order to enable an operation in PEAK PERIODS with a minimum capacity of 5.0 PASSENGERS/m² and a maximum of 6.0 PASSENGERS/m² in the critical section of each line.
 - 6.2.2.2. If, after the 8th year of the CONCESSION, the goals established in the Table 3 of the item 6.2.1 in PEAK PERIODS correspond to the capacity limit of the EXISTING INFRASTRUCTURE and, even so, result in an average monthly capacity over the last twelve (12) months greater than 6.0 PASSENGERS/m² in the CRITICAL SECTION of a given line, the CONCESSIONAIRE shall submit to ARTESP and the INDEPENDENT AUDITOR an assessment of operational measures or new investments that enable the expansion of the capacity of the EXISTING INFRASTRUCTURE on this line.
 - 6.2.2.2.1. ARTESP will evaluate the proposals submitted by the CONCESSIONAIRE within thirty (30) days from their submission, and may reject them in full, partially object to them and propose adjustments, or present their non-objection, including subsidies reported by the INDEPENDENT AUDITOR, to be shared with the PARTIES within fifteen (15) days of receipt of the evaluation issued by the CONCESSIONAIRE.

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

- 6.2.2.2.2. If ARTESP fully rejects the CONCESSIONAIRE's proposals to expand the capacity of the EXISTING INFRASTRUCTURE, the CONCESSIONAIRE may operate with a capacity greater than 6.0 (six) PASSENGERS/m² on the line in question, provided that the goals established in the Table 3 of the item 6.2.1 of this EXHIBIT.
- 6.2.2.2.3. If ARTESP does not object, the CONCESSIONAIRE may request the economic and financial rebalancing of the CONTRACT, exclusively related to new investments, which shall only be initiated after processing under the terms of the applicable rules provided for in the CONTRACT.
- 6.2.3. All travel schedules and their schedules must be established and widely disclosed to USERS as a routine use of the SERVICES, according to the SEAT AVAILABILITY PLAN.
- 6.2.4. During the execution of the INVESTMENT PACKAGES:
- i. When the planned works cause an impact on the operation, the provisions of EXHIBIT III.D of the CONTRACT must be observed.
 - ii. If the PAESE is necessary, the rules of coexistence established in EXHIBIT III.C must be observed.
 - iii. On weekends, from 5 pm on Saturday, extending until 4 am on Monday, there may be circulation on a single track, with a longer interval between trains, but which meets the demand of passengers on the stretch, and may adopt the PAESE (circulation by substitute buses), observing the items 4.1.9, 4.1.9.1 and 7.5.2.
 - iv. On holidays or long holidays, from 1 am on the first day of the holiday and extending until 4 am on the first subsequent business day, weekend rules apply. Holidays, long holidays and weekends that, due to the nature of seasonal events, have in any period a load equal to or greater than 70% of the load of working days, must have this period treated as a working day. The CONCESSIONAIRE may change this percentage upon justification and prior consent of ARTESP, after due evaluation by the INDEPENDENT VERIFIER.
 - v. In the event of any change in the schedule, there must be prior understandings between the CONCESSIONAIRE and the cargo operator with which it shares the roads, according to EXHIBIT III.C.

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

6.2.4.1. The CONCESSIONAIRE may propose to ARTESP the scheduled stoppage of the OPERATION of SERVICES, in sections of the LINES, when a certain work, due to its specificities, cannot be performed within the intervals established in the tables of the item 6.2.1, without prejudice to the PHYSICAL-EXECUTIVE SCHEDULE, admitting, in this case, the stoppage preferably on non-working days, considering holidays and holiday bridges.

6.2.4.1.1. The scheduled stoppage of the operation of the SERVICES, referred to in the previous item, shall be scheduled at least twenty (20) days in advance, and the CONCESSIONAIRE shall indicate the measures that will be adopted to demonstrate that:

- i. The work could not be carried out without the stoppage, without prejudice to compliance with the PHYSICAL-EXECUTIVE SCHEDULE;
- ii. There will be service to PASSENGERS through PAESE, in a sufficient number of vehicles to meet the impacted demand;
- iii. Notice will be issued to PASSENGERS at least twenty (20) days prior to the stoppage;
- iv. It will have enough staff to accompany the PAESE;
- v. There are roads and the possibility of shouldering road vehicles for boarding and disembarking;
- vi. There is a track change device that allows the return of trains at the limit of the interdicted section, or other applicable technical solution;
- vii. The power sectioning in the overhead network must be compatible with the section of road interdicted, or other applicable technical solution;
- viii. The schedule of the prolonged stoppage does not coincide with the "events generating high demand", observing the terms of the CONTRACT;
- ix. Notice will be issued to PASSENGERS at least 2 (two) weeks prior to the scheduled stoppage, through

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

public communication channels, such as panels and displays at stations, announcements in the audio system, websites and mobile applications, social media, temporary signage and other available means.

6.2.4.1.2. The scheduled stoppage requested by the CONCESSIONAIRE shall have the Prior APPROVAL of the INDEPENDENT AUDITOR, subject to compliance with the requirements contained in the previous item within five (5) days from the receipt of said request. After such approval, ARTESP may not deny the requested authorization, provided that the CONCESSIONAIRE has demonstrated compliance with the item 6.2.4.1 and that the scheduled stoppages do not exceed 20 (twenty) annual schedules.

6.2.4.1.3. If the number of scheduled shutdowns is proven to be insufficient to meet the PHYSICAL-EXECUTIVE SCHEDULE, the CONCESSIONAIRE may request ARTESP to authorize scheduled shutdowns in a number higher than that provided for in the previous item, upon prior APPROVAL of the INDEPENDENT AUDITOR and no objection by ARTESP.

6.3. AVERAGE CAPACITY, PEAK PERIOD AND VALLEY PERIOD PARAMETERS FOR THE SERVICES OF LINES 11, 12 AND 13, AND FOR THE AIRPORT EXPRESS SERVICE

6.3.1. The average hourly capacity on the train shall not exceed 6 (six) PASSENGERS/m² in periods when the demand requires the supply of trains less than or equal to the capacity limit of the EXISTING INFRASTRUCTURE. From this limit of the EXISTING INFRASTRUCTURE, the average hourly capacity on the trains may exceed 6 (six) PASSENGERS/m² in the CRITICAL SECTION, provided that the CONCESSIONAIRE operates within the goals established in the tables in the item 6.2.1 of this EXHIBIT.

6.3.1.1. The capacity of the EXISTING INFRASTRUCTURE, measured in the number of PASSENGERS TRANSPORTED per hour, will be defined according to the minimum interval between trips practicable on each line or stretch of line without prejudice to the safety of the operation, considering the signaling system implemented, the civil speed restrictions imposed by the geometry and the characteristics of the road, the number of trains available to the CONCESSIONAIRE and the maximum capacity of 6 (six) PASSENGERS/m² on the trains.

6.3.1.2. The number of PASSENGERS per car will be measured through monitoring associated with CCTV, through specific *software* and digital image

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

processing, with possible use of artificial intelligence, in each of the train cars, and may, alternatively, be replaced by another automated electronic system with equal or better reliability and precision. The automated PASSENGER counting system must provide occupancy level statistics per segment, including for monitoring possible future changes in the SEAT AVAILABILITY PLAN.

- 6.3.1.2.1. The guidelines for the acquisition of the monitoring system are described in EXHIBIT II.C of the CONTRACT.
- 6.3.1.2.2. Measurements must be carried out throughout the COMMERCIAL OPERATION, in PEAK PERIODS and VALLEY PERIODS, on weekdays, weekends and holidays.
- 6.3.1.2.3. For each SERVICE, the CONCESSIONAIRE shall measure the average capacity inside the trains at 15-minute intervals, starting at 4 a.m. and ending at 12 a.m., totaling 80 (eighty) daily measurements. The average hourly capacity will be obtained by the arithmetic average of the last four consecutive measurements and should be calculated every 15 minutes.
- 6.3.1.2.4. For purposes of monthly measurement, the CONCESSIONAIRE shall calculate separately the average capacity in the PEAK PERIODS and in the VALLEY PERIODS, also differentiating business days, Saturdays, Sundays and holidays.
- 6.3.2. The INDEPENDENT VERIFIER will proceed to the monthly measurement of the PEAK PERIODS, highlighting the PEAK PERIODS in graphic form, and presenting the results to ARTESP and the CONCESSIONAIRE, which, if necessary, will propose to ARTESP adjustments in the SEAT AVAILABILITY PLAN, always respecting the capacity of the EXISTING INFRASTRUCTURE, as defined in this EXHIBIT, and considering the attributes of the ADEQUATE SERVICE.
 - 6.3.2.1. The periodicity of measurement of the PEAK PERIODS may be reviewed by mutual agreement between ARTESP and the CONCESSIONAIRE, and duly justified.
- 6.3.3. In the VALLEY PERIOD, the capacity of the train must not exceed 6 (six) PASSENGERS/m² and, in the CRITICAL SECTION, it must not be less than 2 (two) PASSENGERS/m².
 - 6.3.3.1. During the VALLEY PERIOD, the CONCESSIONAIRE must respect the maximum intervals established in the tables in the item 6.2.1 of this EXHIBIT.

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

6.3.3.2. During the VALLEY PERIOD, the CONCESSIONAIRE may operate with intervals shorter than the maximum stipulated in the tables of the item 6.2.1 of this EXHIBIT, provided that the minimum capacity in the critical section of 2 (two) PASSENGERS/m² is respected.

6.3.3.3. On weekends, starting at 5 p.m. on Saturday, extending until 12 a.m. on Monday, as well as on holidays, the CONCESSIONAIRE may request ARTESP authorization to operate with an interval between trains longer than the maximum intervals stipulated in the Tables of the item 6.2.1, aiming at the execution of maintenance services.

6.3.3.3.1. The request that the item deals with 6.3.3.3 shall be carried out at least twenty (20) days in advance, and the CONCESSIONAIRE shall indicate the measures that will be adopted to demonstrate that:

- i. There will be service to PASSENGERS with an interval of no more than 35 minutes;
- ii. Notice will be issued to PASSENGERS at least 2 (two) weeks in advance of the temporary change in the travel schedule to increase the interval between trains, through public communication channels, such as panels and *displays* at stations, announcements in the audio system, *websites* and mobile applications, social media, temporary signage and other available means;
- iii. The temporary increase in the interval between trains does not coincide with the "events that generate high demand", observing the terms contained in the CONTRACT.

6.3.4. The transition between PEAK PERIODS and VALLEY PERIODS should observe that:

- i. Before the end of the VALLEY PERIOD, the fleet of trains in circulation must be gradually expanded, so that the PEAK PERIOD schedule begins with the necessary number of trains in circulation; and
- ii. The fleet of trains in circulation should be gradually reduced after the end of the PERIOD OF PEAK, and the CONCESSIONAIRE is responsible for establishing the operational strategy to meet these conditions, subject to

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

item 6.3.3.

- 6.3.5. The open door times of the trains on the platform must not be less than 20 (twenty) seconds, and the open door time is considered the interval effectively available for boarding and disembarking the PASSENGERS, from the total opening of all doors to the beginning of the closing alarm.
- 6.3.6. ARTESP may, as long as it is motivated, redefine the minimum and maximum levels of capacity inside the trains, measured in PASSENGERS/m² and established in this EXHIBIT for PEAK PERIODS and VALLEY PERIODS, always respecting the capacity of the EXISTING INFRASTRUCTURE.
- 6.3.7. Case, due to the redefinition provided for in item 6.3.6, if it is necessary to make new investments, the CONCESSIONAIRE may request economic and financial rebalancing of the CONTRACT, justified and prior to the implementation of the investments, as provided for in the CONTRACT.
- 6.3.8. The operational management must consider the functions of automated regulation of the operation through the ATO, according to EXHIBIT II.C and make available to ARTESP the data on compliance with operational regularity.

7. SEAT AVAILABILITY PLAN

- 7.1. The SEAT AVAILABILITY PLAN is the document that describes methods, strategies and procedures necessary for the COMMERCIAL OPERATION, including the full availability of the SERVICES, to be adopted to ensure the ADEQUATE SERVICE to the PASSENGERS. Such plan will also describe actions to meet the demand throughout the daily journey, establishing a schedule of schedules and intervals between trains and their commercial speed, identification of the stations of origin and destination of the trips with their kilometric milestones, observing, where applicable, the operating conditions of the METRO-RAIL SYSTEM, among others, and the criteria required in this EXHIBIT, as well as in EXHIBIT II, EXHIBIT III.C and EXHIBIT III.D. It must also consider the PERFORMANCE INDICATORS in order to ensure the levels of comfort required for the provision of the ADEQUATE SERVICE.
- 7.2. The SEAT AVAILABILITY PLAN is part of the OPERATIONAL PLANS established in the CONTRACT.
- 7.3. The SEAT AVAILABILITY PLAN will be prepared annually, at the end of each year of operation, indicating the operating conditions of the SERVICES for 12 (twelve) full months counted from the date of its effectiveness. For the first SEAT AVAILABILITY PLAN, the provisions of item 7.7.1.3.
- 7.4. The CONCESSIONAIRE shall, when submitting the SEAT AVAILABILITY PLAN to ARTESP, demonstrate and declare that said document has all the elements of sizing the supply of seats

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

to meet the demand, respecting the capacity limitations of the system in operation (existing or future), as well as obey the guidelines established in this EXHIBIT, and demonstrate that it is able to be applied in the COMMERCIAL OPERATION. It is the sole responsibility of the CONCESSIONAIRE to comply with the PERFORMANCE INDICATORS. Any contingencies will be treated as operational strategies contained in the RISK AND CONTINGENCY MANAGEMENT PLAN.

7.5. SEAT AVAILABILITY PLAN CONTENT

- 7.5.1. The SEAT AVAILABILITY PLAN plan shall be prepared and managed by the CONCESSIONAIRE for each of the LINE SERVICES and for the AIRPORT EXPRESS SERVICE, and shall be compatible between them, especially as to the fulfillment of the intervals between trains and departure times.
- 7.5.2. The SEAT AVAILABILITY PLAN shall itemize, for weekdays, weekends, holidays and "holiday bridges" (the Mondays and Fridays immediately before or after such holidays), at least the following elements:
- i. Opening hours and interval between trains, for all SERVICES of the LINES, with timetable for the AIRPORT EXPRESS SERVICE;
 - ii. Beginning and end of PEAK PERIODS and VALLEY PERIODS;
 - iii. Travel times and commercial speed of each SERVICE;
 - iv. Number of trains;
 - v. Kilometric production per train and per car, per day;
 - vi. Demonstration of meeting demand, respecting the capacity limitations of the system in operation (existing or future), with compliance with the mandatory guidelines of maximum occupancy in PEAK PERIODS and VALLEY PERIODS, considering the item 6.3 ;
 - vii. Report with hourly chart of scheduled trips for each SERVICE;
 - viii. Kilometric references of the stations, with identification of the station of origin and destination of each trip for each SERVICE;
 - ix. Number of trips per direction, per hour and day, for each SERVICE; and
 - x. Location of trains on standby in support of the operation, and locomotives if applicable.

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

- 7.5.3. The CONCESSIONAIRE will prepare the SEAT AVAILABILITY PLAN according to its best experience and practice to program the offer of seats in front of the SERVICES, necessarily in safe conditions.
- 7.5.4. To obtain the greatest efficiency in the sizing of the SERVICES, with the proper allocation of ROLLING STOCK, the CONCESSIONAIRE must follow the limits established in item 6 of this EXHIBIT, observing the provisions of item 7.6, as appropriate.
- 7.6. The SEAT AVAILABILITY PLAN must also comply with the following conditions:
- 7.6.1. Present a report with the Demand Graph considering that:
- i. The chart must be prepared from individualized data of PAYING PASSENGERS, FREE PASSENGERS and TRANSFER;
 - ii. From the data on the entry and exit of PASSENGERS on the blocking lines, including transfers, and the volumes of passengers inside the trains, a detailed loading report must be generated in a continuous graph throughout the day;
 - iii. The data must be grouped by time slot and by segment, considering the most loaded direction to determine the supply of seats, and must allow the verification of the average level of capacity inside the trains;
 - iv. The data should be complemented by demand studies, according to methodologies recognized in the area of Transportation Engineering, contemplating models of trip generation, trip attraction, modal division and trip allocation (known as the four-stage model), carried out in market *software* recognized as enabled and calibrated for statistically sufficient samples, based on: network supply scenarios agreed with ARTESP; latest research home origin-destination or mobility provided by ARTESP; historical records; macroeconomic projections; other sources of data and research suggested by the CONCESSIONAIRE and previously considered valid by ARTESP;
 - v. Based on this information, the report with the Expected Demand chart for the following 12 (twelve) months that supported the preparation of the SEAT SUPPLY PLAN must be presented, accompanied by a technical report justifying it;
 - vi. The historical evolution of the demand, recorded by the CONCESSIONAIRE, once the OPERATION has begun; and

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

vii. Passenger demand forecasts resulting from studies by the CONCESSIONAIRE.

7.6.2. Consider the following aspects:

- i. Forecast of train injection, defining a strategy for each operational *loop* and meeting the Forecast Demand Graph, starting in the early hours of the morning;
- ii. The supply adjusted to meet the demand with the least amount of trips possible, and without harming the comfort levels established in this EXHIBIT;
- iii. The offer of the AIRPORT EXPRESS SERVICE must meet the demand sizing for the peak hour, observing the interval limitation imposed by sharing with the tracks of LINES 11 and 12, in order to minimize the impact on the operation of these two lines.

7.6.3. It should also provide:

- i. The conditions of circulation of MRS freight trains and the conditions of access and operational coexistence contained in the MRS/CPTM AGREEMENT and in the Term of Commitment between SPI and MRS, both contained in EXHIBIT XIII, considering the sharing of the tracks of the LINES;
- ii. The circulation of the freight train sharing the tracks on which the SERVICES of LINES 11 and 12 operate may not affect the PERFORMANCE INDICATORS provided for in EXHIBIT III.D, provided that the ranges provided for in the MRS/CPTM AGREEMENT and item i above are respected;
- iii. The procedures for coexistence of works and operation, to be defined in compliance with the guidelines for coexistence, contained in EXHIBIT III.C; and
- iv. The conditions defined in the MRS/CPTM AGREEMENT and in the Term of Commitment between SPI and MRS, contained in EXHIBIT XI, with regard to the mandatory right of way of freight trains, are extended to the OPERATION in the sections of LINES 11 and 12, and the CONCESSIONAIRE and MRS must enter into operational procedures in accordance with the guidelines defined in this EXHIBIT and in EXHIBIT III.C.

7.6.4. The guidelines for the operation of the TOURIST EXPRESS and other passenger transport services not subject to the CONTRACT are established in Part V of EXHIBIT III.C, and must be considered for the preparation of the SEAT AVAILABILITY PLAN.

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

7.7. Submission of the SEAT AVAILABILITY PLAN

7.7.1. The SEATING OFFER PLAN for the SERVICES, prepared by the CONCESSIONAIRE, shall be submitted to the evaluation of the INDEPENDENT VERIFIER and subsequent non-objection by ARTESP 60 (sixty) days before its effective date, under the terms established in this EXHIBIT and in the CONTRACT.

7.7.1.1. The INDEPENDENT VERIFIER will have a period of 15 (fifteen) days to analyze and forward a report to ARTESP so that it issues its non-objection;

7.7.1.2. In order for ARTESP to issue a non-objection to the SEAT AVAILABILITY PLAN, in addition to the report issued by the INDEPENDENT VERIFIER indicated in the item above, ARTESP may request, from the TECHNICAL SUPPORT:

- i. In the case of the first SEATING OFFER PLAN, in addition to the fulfillment, as appropriate, of these items, the conditions of the items 7.7.1.3 and 7.7.1.4;
- ii. In any case, confirmation to the fulfillment of the items 7.5 and 7.6; and
- iii. In any case, the verification of the calculations made, the correct sizing of the offer, and that the following were observed: (a) the best practices based on previous results; and (b) the parameters set forth in this EXHIBIT in the performance of the calculations;

7.7.1.3. During the PRE-OPERATIONAL PHASE, for the presentation of the SEAT AVAILABILITY PLAN, the CONCESSIONAIRE shall, based on its demand projections, submit for approval by ARTESP a review of the hourly schedule in progress on the LINES and on the AIRPORT EXPRESS SERVICE, considering the hourly charts in force and in use by CPTM.

7.7.1.3.1. The first SEAT AVAILABILITY PLAN must be delivered 90 (ninety) days before the beginning of the COMMERCIAL OPERATION of the SERVICES, especially in compliance with the provisions of item 7.7.1.4.

7.7.1.4. The preparation of the first SEAT AVAILABILITY PLAN will be based, for the purpose of defining the travel offer: (i) the demand for LINE 11, LINE 12, LINE 13 and the AIRPORT EXPRESS SERVICE, on the SIGNATURE DATE, presented by ARTESP in the verified operation; (ii) the forecasts of passenger demand resulting from studies by the CONCESSIONAIRE; and (iii) the conditions

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

contained in the items 7.1 To 7.6, and, where applicable, the items 7.7 and 7.8.

7.7.1.5. The SEAT AVAILABILITY PLANS, with the non-objection of ARTESP, will come into force in the CONTRACTUAL YEAR following their preparation.

7.7.1.5.1. In the event of delays in the process of obtaining ARTESP's non-objection, the SEAT AVAILABILITY PLAN in force until then will be maintained and provisionally applied.

7.8. Modifications to the SEAT AVAILABILITY PLAN

7.8.1. Unforeseen changes in demand may give rise to temporary or permanent modifications after the preparation of the SEAT SUPPLY PLAN.

7.8.1.1. Temporary modification is considered to be one authorized for a certain and determined time, or authorized while the circumstances that have motivated it last, caused by an exceptional, unforeseen situation, affecting for a short period the demand and the SEAT AVAILABILITY PLAN of each SERVICE;

7.8.1.2. Permanent modification is considered to be that which meets demand scenarios that were not initially foreseen, but that are consolidated over time, and will be taken into account in the preparation of the SEAT SUPPLY PLAN for subsequent years.

7.8.2. The CONCESSIONAIRE may propose modifications to the SEAT AVAILABILITY PLAN, and receive the non-objection of ARTESP, applying to this end, as applicable, the obligations contained in item 7.7.1.

7.8.3. Modifications to the SEAT AVAILABILITY PLAN may be determined by ARTESP.

7.8.3.1. ARTESP may determine the modification, temporary or permanent, of the operating conditions, taking into account, justifiably, necessary changes in the quality of the service or in the evolution of demand.

7.8.3.2. Upon receipt of ARTESP's determination, the CONCESSIONAIRE, within a period not exceeding fifteen (15) days, shall prepare a document called "temporary modification", reflecting the modification determined in the SEAT AVAILABILITY PLAN in force, when the necessary modification is temporary, or a document that reflects the draft of a new SEAT AVAILABILITY PLAN, when the modification is permanent.

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

- 7.8.3.3. The temporary modification document or the new SEAT AVAILABILITY PLAN must comply with the provisions of this EXHIBIT for its content and processing provided for in item 7.7.
- 7.8.3.4. The determination of a permanent modification of the conditions established in the SEAT AVAILABILITY PLAN by ARTESP will give rise to the revision of the goals established for the PERFORMANCE INDICATORS provided for in EXHIBIT III.D of the CONTRACT.
- 7.8.4. ARTESP reserves the right to determine, on an exceptional and urgent basis, duly motivated and justified, a temporary modification for a period of time not exceeding 3 (three) days, with a change in the quantity of CAR X KM OF SERVICE to meet sudden changes in demand, incidents and other contingents not provided for in the SEAT AVAILABILITY PLAN, which will not depend on the observance of the procedure described above, and it is the duty of the CONCESSIONAIRE to comply with the exceptional and urgent determination of the change determined as soon as notified by ARTESP, within the required period that the situation requires and within the limit of up to 6 hours, always respecting the capacity of the EXISTING INFRASTRUCTURE.
- 7.8.4.1. The impacts of a temporary modification in the SEAT AVAILABILITY PLAN, determined by ARTESP will not be computed for the purposes of measuring the PERFORMANCE INDICATORS.
- 7.8.5. The determinations of ARTESP regarding necessary modifications in the SEAT AVAILABILITY PLAN do not remove the right of the CONCESSIONAIRE, when resigned, to seek the solution of its divergence through the methods of conflict resolution allowed by the CONTRACT.
- 7.8.6. Except as otherwise provided in this EXHIBIT, in the event of emergency or crisis situations, duly declared, the CONCESSIONAIRE shall continue, when technically possible, including considering the safety conditions applicable to the circumstances, to provide the SERVICE under the conditions provided for in the SEAT AVAILABILITY PLAN, and may, as far as possible, provide the SERVICE with the changes that are technically necessary, if possible after prior consent of ARTESP, provided that such changes are indispensable to keep the SERVICE in operation and with adequate coordination of the CONCESSIONAIRE, notifying ARTESP, with due justifications, of the solutions applied to the emergency or crisis situation that arose or to mitigate its effects.
- 7.8.6.1. The information to ARTESP must be provided through the computerized system referred to in the item 8.1.
- 7.8.7. While the emergency or crisis lasts, the operating conditions and compliance with the

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

service levels related to the PERFORMANCE INDICATORS must be observed and measured, under the terms of EXHIBIT III.D. Any tolerance regarding the fulfillment of the service levels will only be considered: (i) in fortuitous cases and force majeure, as qualified in the CONTRACT and in EXHIBIT V, and observed the item 7.8.7.1; and (ii) in the cases referred to in the Clauses of the CONTRACT, subject to their terms.

7.8.7.1. Apart from the hypotheses provided for in the CONTRACT and EXHIBIT V, those resulting from the lack of compliance with mitigation measures by the CONCESSIONAIRE, under the terms set forth in Exhibit III.D, such as: cleaning of gutters, maintenance of the existing drainage system, maintenance of electrical systems, and maintenance of the LPS system (lightning protection system), among others.

7.8.8. Except for exceptional situations that require changes in the short term, the INDEPENDENT VERIFIER must prepare a technical report prior to the decisions of ARTESP regarding the modifications in the SEAT AVAILABILITY PLAN.

7.9. Inspection and monitoring of the SEAT AVAILABILITY PLAN

7.9.1. Compliance with the SEAT AVAILABILITY PLAN will be supervised by ARTESP through the instruments and processes of Operational Management, observing the conditions of this EXHIBIT III.A, especially the items **Erro! Fonte de referência não encontrada.** and 8 of this EXHIBIT, as well as the conditions set forth in the CONTRACT.

7.9.2. The CONCESSIONAIRE must report to ARTESP the CAR X KM OF SERVICE traveled daily, weekly, monthly and annually, as well as the differences between the actual kilometers for PASSENGER transportation and those scheduled in the SEAT AVAILABILITY PLAN.

7.9.3. The CONCESSIONAIRE shall report the production referred to in the previous item based on the information obtained through auditable methods of calculation and measurement, which shall be accessible by ARTESP, at any time and in real time.

7.9.4. The CONCESSIONAIRE shall include in particular the results of the kilometric production (CAR X KM OF SERVICE) in the management reports (CMMS) established in item 8 this EXHIBIT.

7.9.5. For the other PERFORMANCE INDICATORS, the CONCESSIONAIRE shall present the information in accordance with what is specified in EXHIBIT III.D and EXHIBIT VIII.

8. OPERATIONAL MANAGEMENT

8.1. The CONCESSIONAIRE shall provide and make available to ARTESP and the INDEPENDENT

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

VERIFIER, with unrestricted access and at any time, a COMPUTERIZED OPERATION MANAGEMENT SYSTEM (CMMS) where all activities are recorded in a database that allows the data to be retrieved at any time and constitute a history of the operation of the assets granted, allowing the visualization, periodic and automatic issuance and the extraction of pre-defined or customized reports, according to the demands minimally disposed in the performance of the services of the LINES and the AIRPORT EXPRESS SERVICE, containing information or images about:

- i. Interval between trains scheduled and carried out throughout the operational period;
- ii. Scheduled and completed travel time;
- iii. Number of scheduled trips and daily trips made, by hourly period;
- iv. Mileage production (CAR X KM OF SERVICE) daily, weekly, monthly and yearly;
- v. Reversal time at terminals;
- vi. Entries/exits/transfers of PASSENGERS by station, by time interval;
- vii. Failures/occurrences of the electrical traction system, signaling, permanent track, buildings, rolling stock and other equipment and their respective performances;
- viii. Occurrences with PASSENGERS or passers-by, including those related to operational safety and public safety;
- ix. Notable Incidents, meaning Notable Incident:
 - a. Service interruption above 2 (two) intervals between trains or 20 (twenty) minutes beyond the scheduled interval, whichever is shorter;
 - b. Interruption of the trip with evacuation on the road or evacuation on a platform;
 - c. Irregular performance of the security body or operational team with consequent threat to the integrity of PASSENGERS or passers-by;
 - d. Those resulting from unsafe conditions, defined as: failures, defects, technical irregularities and lack of safety devices that put at risk the physical integrity and/or health of people and the safety of facilities and equipment; and
 - e. Cancellation of a trip on the AIRPORT EXPRESS SERVICE, not previously

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

scheduled, that is, not agreed with ARTESP, at least 3 (three) days in advance.

- x. Images of the Notable Incidents internal and external to the stations, trains, PERMANENT TRACK and other CONCESSION AREAS, delivered to the GRANTING AUTHORITY within a maximum of 3 hours of the event;
- xi. Electricity consumption ;
- xii. Train capacity levels by time period;
- xiii. Occurrences of accidents with PASSENGERS or passers-by by place and time period;
- xiv. Daily operational availability of the train fleet;
- xv. Occurrences that may affect operational safety as defined by the Permanent Safety Commission (COPESE) of the CPTM, or equivalent body of ARTESP or the GRANTING AUTHORITY;
- xvi. Internal and external images of the various facilities of the facilities, stations, tracks, trains, etc.;
- xvii. Flow control in the entry, exit and transfer blocks, in the station premises and other modes of integration of the LINES, and other modes that have an interface with them;
- xviii. Presence of freight trains on their tracks in the face of sharing;
- xix. Urgent occurrence , corresponding to any and all occurrences that cause interference in the COMMERCIAL OPERATION and that contribute to the loss of train circulation, leading to the need for immediate maintenance to reestablish its full operability in cases of CONSEQUENT SUPPRESSION or IMMEDIATE TERMINATION OF SERVICE;
- xx. Consequent Suppression - Immediate Service, failure that directly interferes with the circulation of the ROLLING STOCK without stopping or harming the operating system.

Examples:

- ROLLING STOCK only able to complete the trip for subsequent collection.
- False occupation.
- Telephone breakdown in substation / disconnecter / Operational Control Center (CCO) / Maintenance Information Center (CIM).

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

- Track sign with inaccurate appearance.
- xxi. Immediate SERVICE Cancellation - Emergency Care, failure that paralyzes the circulation of ROLLING STOCK on one or more main roads, or causes total breakdown in systems and equipment vital to the operation of the train or involves Level Crossing (PN).

Examples:

- ROLLING STOCK without circulation conditions;
 - Breakdown of OVERHEAD TRACTION NETWORK;
 - Derailment that interferes with the main track;
 - Breakdown in PN; and
 - A work of art that compromises the safety of passengers.
- 8.2. CMMS, referred to in item 8.1, to be made available by the CONCESSIONAIRE, must be approved by the INDEPENDENT VERIFIER, and it is the prerogative of ARTESP to carry out audits in the system, at any time and without prior notice, including through independent auditing companies, if deemed necessary.
- 8.3. It is forbidden to establish any other control parallel to CMMS and CMMS, to monitor the occurrences of the information that originally and mandatorily must be included in the aforementioned systems, preventing any conduct, contrary to good practices, from distorting the information and impairing the reliability of the data contained in CMMS and CMMS for the calculation of PERFORMANCE INDICATORS. The occurrence of such a situation will give rise to a penalty, under the terms of EXHIBIT V.

9. INTERRELATIONSHIP WITH OTHER TRANSPORT SYSTEMS

- 9.1. At the discretion of ARTESP, the CONCESSIONAIRE shall make available the information contained in item 8.1, or part of them, to transport operators or other concessionaires with physical integration, of the METRO-RAIL SYSTEM.
- 9.1.1. In the event of any Notable Incident, ARTESP must be informed within thirty (30) minutes. The means of communication will be adjusted between ARTESP and the CONCESSIONAIRE.
- 9.1.2. ARTESP may request more details, on which it will deliberate on the treatment to be given to the Notable Incident in question, and may even proceed to the opening of an

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

Administrative Proceeding for investigation.

- 9.2. The monitoring subsystems of the CCO of the SERVICES, which is expected to be implemented at the CONCESSIONAIRE's facilities in Brás, must establish a collaborative relationship with the CCO of CPTM, MRS, and the other metro-rail lines of the RMSP, informing about the occurrences of relevant facts and events and Notable Incidents, in real time, in order to obtain a better overall security in the system, observing the rules of coexistence in EXHIBIT III.C.
- 9.3. The CONCESSIONAIRE shall make available to metro-rail transport operators and other concessionaires with physical integration, a telephone system for direct and exclusive communication between the operational supervision rooms of the stations with the transfer of PASSENGERS between the lines and their respective control centers, in order to optimize and expedite the treatment of demands during the daily operation of the system.
- 9.4. The CONCESSIONAIRE shall make available to ARTESP, or to whomever it designates, the visualization of the information of the Centralized Control System regarding the movement of the trains and the electrical supply, in order to monitor the operational strategies during the daily operation of the system. This visualization should be done through the provision of consoles for supervision of the LINES directly connected to the servers of the Centralized Control Systems of the 3 lines and the Energy Control System. These consoles should give access to real-time monitoring of train movement and the list of alarms and events *online* and *offline*.
- 9.5. The CONCESSIONAIRE shall make available to ARTESP the images of the cameras of the existing monitoring systems, for viewing only, in real time, and by means of recordings, at an electronic address to be provided by ARTESP.
- 9.5.1. As for the systems to be implemented by the CONCESSIONAIRE, a compatible and integrable system must be used, which allows the availability of visualization of the images by ARTESP in real time and in recording, with at least 60 (sixty) days of uninterrupted storage recording.
- 9.6. The CONCESSIONAIRE shall formalize agreements with the operators that have integration or complementarity to the LINES or the AIRPORT EXPRESS SERVICE, for the establishment of operational and maintenance coexistence procedures, according to the rules contained in EXHIBIT III.C.

10. MOVEMENT OF TRAINS

- 10.1. Under normal operating conditions, the movement of the trains must be carried out manually by the driver in the cabin of the trains of the LINES and the AIRPORT EXPRESS SERVICE, with supervision of the signaling with at least a degree of automation GoA1 (*Manual Operation with Automatic Train Protection*), according to IEC-62290 Standard. The planned replacement of the signalling system must be in accordance with IEC-62290 and in compliance with the mandatory

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

requirements for the signalling system specified in EXHIBIT II.C.

- 10.2. The CONCESSIONAIRE may adapt and update the operation to higher degrees of automation GoA2 (*STO – Semi-Automated Train Operation*), GoA3 (*DTO – Driveless Train Operation*) or GoA4 (*UTO – Unattended Train Operation*) at its own risk.
- 10.3. In cases of operational degradation caused by failure of the trains or the signaling system, the manual modality may be used, in which the train will move at reduced speed in accordance with safety limits, observing the operational procedures of the CONCESSIONAIRE, with full control of the train driver, if the signaling system to be installed by the CONCESSIONAIRE allows it.
- 10.4. The train in COMMERCIAL OPERATION must circulate with all its doors closed, and without PASSENGERS outside the train. Ensuring the safety conditions of the PASSENGERS and employees, exceptionally, the movement of the train will be allowed, with open doors, in accordance with the operational procedures of the CONCESSIONAIRE, for the evacuation of the train and its removal from the OPERATION.

11. SAFETY CONDITIONS

- 11.1. The CONCESSIONAIRE will adopt procedures and measures so that the transportation of PASSENGERS is carried out in safe conditions, ensuring the physical integrity of people and the preservation of property assets.
- 11.2. The CONCESSIONAIRE must maintain a Permanent Operational Systems Safety Commission (COPESE) to investigate occurrences that may compromise the security of the operating systems of the LINES and the AIRPORT EXPRESS SERVICE, putting at risk the PASSENGERS, passers-by, employees, contractors, equipment and facilities.
- 11.3. The CONCESSIONAIRE will be responsible for obtaining and renewing the Fire Department Inspection Certificate (AVCB) for all locations covered within the CONCESSION AREA, in accordance with State Decree No. 56,819, of March 10, 2011.
- 11.4. All CONCESSIONAIRE facilities must have equipment aimed at the safety of PASSENGERS, passers-by, systems, buildings and employees. Safety equipment must be available and kept in perfect condition for use.
- 11.5. Entry or permanence in the CONCESSIONAIRE's premises is forbidden to persons who may cause danger, nuisance or damage to the safety of the SERVICE, or any type of risk to themselves or others, as established in EXHIBIT III.E.
- 11.6. When there are reasons that may compromise the safety of PASSENGERS, passers-by and/or employees, or in a situation of technical failure, the CONCESSIONAIRE will remove the causes

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

of the disturbance in the shortest possible time, and may, in the meantime:

- i. Interrupt, in whole or in part, the provision of the SERVICES;
- ii. Release the blockades for the movement of PASSENGERS of the SERVICES;
- iii. Provide service with cars forbidden to PASSENGERS;
- iv. Evacuate PASSENGERS from trains, driving them safely to the nearest station or transferring them to another train. In this situation, trains may be towed with or without PASSENGERS, provided that the safety conditions of the coupling and towing are guaranteed;
- v. Close or restrict access to any of the stations.

11.6.1. Even during the exercise of the conducts provided for in the items of the item 11.6 the INDICATORS PERFORMANCE REQUIREMENTS shall continue to be calculated and applied, in the manner provided for in EXHIBIT III.D, except exclusively for situations regulated differently in the CONTRACT or in EXHIBIT III.D.

11.7. During the COMMERCIAL OPERATION, the public areas that begin at the access to street level will remain open, signposted and illuminated. Outside the period of COMMERCIAL OPERATION, access to the paid areas will remain closed. Exceptionally, the CONCESSIONAIRE may close accesses to any of the stations during the OPERATION period, provided that the conditions of the SERVICE require it and always for its efficiency or improvement, communicating to ARTESP, including for inspection purposes.

11.8. In the event of a power outage, beacon lighting must be maintained to enable the evacuation of PASSENGERS safely.

11.9. In case of operational contingency, if there is an excess of PASSENGERS on the platform that compromises their safety, access to the station or platform may be restricted or interrupted.

12. MEDICAL CARE AND FIRST AID

12.1. The CONCESSIONAIRE shall provide care to injured persons or those with sudden illness who, in the CONCESSION AREA, need outpatient and pre-hospital care, and, when necessary, hospital removal directed to public health agencies, by the fastest possible means, and shall provide for the appropriate procedures in the PASSENGER SERVICE PLAN and maintain updated control of the registration and attendance of all occurrences, forwarding to ARTESP, monthly, or when requested, the records and measures adopted. The CONCESSIONAIRE, in view of the concrete situation, shall adopt the required and necessary measures, in accordance with the procedures provided for in the plan, under the terms of the AGREEMENT.

13. OF THE SECURITY CORPS

13.1. The CONCESSIONAIRE will organize and maintain its own Security Staff, which will act in all operational areas of the CONCESSION, observing the OPERATIONAL SECURITY PLAN.

13.2. In situations of operational contingencies, Notable Incidents or Public Safety, the CONCESSIONAIRE's Security Corps may act on the premises of the transfer stations of the other operators, as well as the security corps of the other operators of the METRO-RAIL SYSTEM may also act on the premises of the CONCESSIONAIRE, under the same circumstances, with its procedures duly implemented, subject to EXHIBIT III.C.

13.3. The action of the Security Corps should aim to:

- i. Public safety of PASSENGERS;
- ii. Conduct of PASSENGERS;
- iii. Prevention and repression of crimes and misdemeanors on the premises of the CONCESSIONAIRE and preservation of its assets;
- iv. Maintenance or restoration of normal traffic of the METRO-RAIL SYSTEM in the face of any fact or emergency, including of a police nature, that may prevent or disturb it;
- v. Immediate removal, regardless of the presence of police authority, of victims, objects or vehicles that, in the event of an accident or crime, are on the trackbed, inside the train, or in operational areas, harming the traffic of the METRO-RAIL SYSTEM or the circulation of the train;
- vi. Arrest of criminals and offenders in flagrant delicto and referral to the competent authority;
- vii. Seizure of instruments, objects or values related to crimes or criminal misdemeanors, delivering them, together with the offender, if applicable, to the competent police authority;
- viii. Isolation of the places of accident, crime or criminal misdemeanor, for the purpose of expert verifications, provided that it does not cause the stoppage of the traffic of the METRO-RAIL SYSTEM;
- ix. Inspection of the operational areas, aiming at the location of suspicious objects arising from threats to the operation of the METRO-RAIL SYSTEM;

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

- x. Administer first aid to victims and inform the competent police authority, if applicable, in accordance with the law;
 - xi. Transport the injured to the emergency room or hospital, keeping custody of their belongings, until the responsible medical team takes over the occurrence;
 - xii. If there are fatal victims, remove them to a place where there is no interference with the operation of the METRO-RAIL SYSTEM; and
 - xiii. Draw up a police report for timely forwarding to the competent authority and provision to interested parties.
- 13.4. The employees of the Security Corps must wear uniforms standardized by the CONCESSIONAIRE, in order to enable their identification, not overlapping any other object except those provided for in the operational procedure. The personal identification of Security Corps employees must remain visible at all times. The specifications of the equipment used by the Security Corps must be evaluated by ARTESP, with an evaluation by the TECHNICAL SUPPORT.
- 13.5. The use of the equipment according to the previous item has the basic purpose of ensuring the safety of PASSENGERS, employees and the preservation of the METRO-RAIL SYSTEM network.
- 13.6. The performance of the CONCESSIONAIRE's Safety Corps must be established in accordance with the OPERATIONAL SAFETY PLAN.
- 13.7. The CONCESSIONAIRE may, in the interest of public safety, allocate facilities in its service or operational areas for the installation of Military Police stations for the purpose of assisting preventive and repressive policing, under the terms of the CONTRACT, informing ARTESP.
- 14. MONITORING, PREVENTION AND CONTAINMENT PLAN FOR REVENUE EVASION**
- 14.1. The CONCESSIONAIRE, as manager of the SERVICES and in view of the duty and obligation to provide the ADEQUATE SERVICE, shall be responsible for containing and/or inhibiting any evasion of revenue, using all legally admissible means and resources for its execution, and, to this end, it shall, within sixty (60) days from the beginning of the PRE-OPERATIONAL PHASE, submit to ARTESP a detailed report with a survey of situations that give rise to a risk of possible evasion, and that contains an assessment of the guidelines for the preparation of the PLAN FOR MONITORING, PREVENTION AND CONTAINMENT OF REVENUE EVASION, which is dealt with in the following item.
- 14.2. Within ninety (90) days from the preparation of the report referred to in the previous item, duly submitted to ARTESP, the CONCESSIONAIRE shall prepare its PLAN FOR MONITORING, PREVENTION AND CONTAINMENT OF REVENUE EVASION, containing rules and procedures to

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

curb and mitigate the risk of non-payment of the PUBLIC FARE for the services of the LINES, as well as the AIRPORT EXPRESS SERVICE, presenting it to ARTESP, for no objection.

14.2.1. The MONITORING, PREVENTION AND CONTAINMENT PLAN FOR REVENUE EVASION shall:

- i. Demonstrate the way in which the CONCESSIONAIRE plans to act, identify and monitor potential evasion events, thus understood as situations of fraud in the payment of the PUBLIC FARE of the services of the LINES, as well as of the AIRPORT EXPRESS SERVICE, except in the event of technological fraud in a payment system that is not operated by the CONCESSIONAIRE itself;
- ii. Indicate goals and desired results, which allow the monitoring of the implementation of the PLAN FOR MONITORING, PREVENTION AND CONTAINMENT OF REVENUE EVASION; and
- iii. Contain an indication of the presentation of a Monthly Report with all the mapping of the month due, in relation to the application of the plan, the results obtained, qualification and quantification of the occurrences in all its aspects, without waiving the obligation established in item 14.2.2 Item ii, within the deadlines set out in this item 14.

14.2.2. The MONITORING, PREVENTION AND CONTAINMENT REVENUE EVASION PLAN must also demonstrate the forms and deadlines or the periodicity in which the CONCESSIONAIRE shall:

- i. Carry out the mapping and management procedure of risks related to evasion, paying attention to the technical particularities of each SERVICE.
- ii. Report to ARTESP and the INDEPENDENT VERIFIER each evasion event identified by itself or by third parties.
- iii. Receive information on an evasion event identified by ARTESP or by third parties.
- iv. Demonstrate the source of each identified evasion event.
- v. Justify the occurrence of the evasion event in view of the measures already established in the PLAN FOR MONITORING, PREVENTION AND CONTAINMENT OF EVASION OF REVENUE.
- vi. Categorize the severity of each identified dropout event and the possibility of its recurrence.

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

- vii. Present actions to contain each identified evasion event, as well as its implementation schedule for solution, including the measures adopted to avoid recurrence.
 - viii. Carry out interfaces and agreements with ARTESP, other public entities or delegates or service concessionaires of the METRO-RAIL SYSTEM, to carry out joint actions to mitigate evasion.
 - ix. Monitor the misuse of the TRAVEL RIGHT, subject to the provisions of item 4.1.5 of this EXHIBIT III.A.
 - x. Monitor the improper use of tickets/gratuity cards, instituted by the GRANTING AUTHORITY or by ARTESP, by virtue of Laws and Resolutions of the competent State Secretariat, for the use of PASSENGERS, as well as ACCESS RELEASE CARDS for use by the CONCESSIONAIRE, subject to the provisions of item 4.1.8 of this EXHIBIT III.A, as well as EXHIBIT III.E.
- 14.2.3. Observing the arrangement of the item 14.2.3.1, the CONCESSIONAIRE shall, at least every six (6) months, update the PLAN FOR MONITORING, PREVENTION AND CONTAINMENT OF REVENUE EVASION, and shall submit such updates for non-objection by ARTESP and inspection action.
- 14.2.3.1. In the updates to the MONITORING, PREVENTION AND CONTAINMENT PLAN FOR REVENUE EVASION, the CONCESSIONAIRE shall take into account the events identified in the last six (6) months and actions taken to mitigate its risk of recurrence.
- 14.2.3.2. The CONCESSIONAIRE shall update the PLAN FOR MONITORING, PREVENTION AND CONTAINMENT OF REVENUE EVASION whenever the concrete circumstances so require, in view of the evasion events recorded in the course of the same semester of its edition.
- 14.2.3.2.1. The update referred to in the item above must be carried out within 5 (five) business days from the occurrence of the event, and must be submitted to ARTESP, for non-objection. This period may be extended as long as the justification motivated by the CONCESSIONAIRE is accepted by ARTESP.
- 14.2.3.3. The non-objection of ARTESP to the plans and updates referred to in item 14.2.3 and its sub-items do not exempt the CONCESSIONAIRE from responsibility for any insufficiency of actions taken to inhibit evasion.

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

14.2.3.4. In the PLAN FOR MONITORING, PREVENTION AND CONTAINMENT OF REVENUE EVASION, as well as its updates, ARTESP may require the adoption of rules and guidelines in force in other public entities or delegates or concessionaires of services of the METRO-RAIL SYSTEM, respecting the economic and financial balance of the CONTRACT.

14.2.3.5. In the performance of the inspection, ARTESP may identify a mechanism for solving revenue evasion, if the ineffectiveness of the measures provided for in the current PLAN FOR MONITORING, PREVENTION AND CONTAINMENT OF REVENUE EVASION is evidenced, and propose changes in the content of said plan, at any time, as a way to inhibit evasion, and the CONCESSIONAIRE must evaluate the revision proposal for its implementation, within the term of the item 14.2.3.2.1, and their eventual refusal must be motivated.

14.2.3.6. ARTESP may determine the execution of ADDITIONAL INVESTMENTS by the CONCESSIONAIRE if such measures are necessary to reduce evasions, observing the discipline contained in Chapter XI of the CONTRACT.

14.2.4. After the start of the COMMERCIAL OPERATION, the CONCESSIONAIRE shall make available to ARTESP a monthly report of the results of the execution of the activities of the PLAN FOR MONITORING, PREVENTION AND CONTAINMENT OF REVENUE EVASION, as well as compliance with the proposed schedule.

15. SERVICE TO THE PUBLIC

15.1. In order to provide the service with courtesy, the CONCESSIONAIRE and its employees will serve the PASSENGERS with respect, civility and consideration.

15.2. The assistance provided to the public must be established in accordance with the PASSENGER SERVICE PLAN and must cover the entire METRO-RAIL SYSTEM.

15.3. All employees of the CONCESSIONAIRE must be trained to perform their duties and be uniformed when on duty.

15.4. At the stations, there must be at least one employee to perform the service and guide the PASSENGERS, during the period of OPERATION, which includes clarifications and guidance about the ticketing system, as well as observing the provisions of item 14.2.2 of this EXHIBIT. Such guideline must be contained in the PASSENGER SERVICE PLAN. The number of these employees must be dimensioned in accordance with the demand of each station and be included in the PASSENGER SERVICE PLAN.

15.5. The CONCESSIONAIRE shall also maintain visual information to the PASSENGERS, as well as the CONCESSION REGULATION, highlighting the duties and obligations of the CONCESSIONAIRE and

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

the PASSENGERS, posted in visible places in all stations and trains.

- 15.6. The public address system will be used to issue exclusively operational messages, of an informative, educational or safety orientation nature, or even for the dissemination of information related to the public interest, disclosed by the CONCESSIONAIRE by determination of ARTESP, prohibiting the promotion of brands, products and people.
- 15.7. In the spaces sold or assigned, the CONCESSIONAIRE is responsible for the quality and safety of the services provided by the hirers and for handling the complaints of the PASSENGERS, except for the regulations contained in Part III of EXHIBIT III.C.

16. COMPLEMENTARY SERVICES

- 16.1. The CONCESSIONAIRE shall institute and maintain a Lost and Found service, disclosing it to the public. This Lost and Found service shall cover the SERVICES and shall not be integrated with those of the other Concessionaires of the METRO-RAIL SYSTEM, as provided for in EXHIBIT III.E.
- 16.2. The storage of the goods, as well as their control, their return to the PASSENGER or their destination to a charitable entity (e.g., Solidarity Fund of the State of São Paulo), must be managed by the CONCESSIONAIRE.
- 16.3. The CONCESSIONAIRE shall maintain relationship channels with the PASSENGERS, as well as maintain in a visible place the modes of access to such channels, including those made available by ARTESP.
- 16.3.1. The CONCESSIONAIRE must provide service via telephone with free direct dialing, social networks, SMS communication and communication by application.
- 16.3.2. The CONCESSIONAIRE shall provide operational, service and occurrence information in the SERVICES through the electronic media embedded in the trains and stations, and its communication channels with the PASSENGERS and the population, including Notable Incidents (defined in item 8.1Item ix) and its impacts on the OPERATION until normalization of the SERVICE. Communications must be given within the time limit that each occurrence, operational information and service information require, being efficient so that it fulfills its purpose.
- 16.3.3. The PASSENGER SERVICE PLAN shall consider all aspects involving the provision of the SERVICES and any impact that may be generated on the PASSENGERS, containing information on the conditions and characteristics of the SERVICES and the communication actions related to any occurrence or incident, which may generate any inconvenience to the PASSENGERS, regardless of whether it is caused unexpectedly or scheduled.

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

- 16.3.3.1. The information to the PASSENGER will be given through communication channels to deliver the messages, whether printed or posted on bulletin boards, or disclosed on electronic and variable message boards, electronic media and addresses, social networks, in addition to sound communication (recorded or not) by the means available at the stations and trains, and such information must be transmitted: (i) immediately, considering, for this purpose, a maximum of 2 (two) intervals between scheduled trains or 20 (twenty) minutes, whichever is shorter, when there is any occurrence or incident that may impact the operation and provision of the SERVICES, or that in any way cause inconvenience to the PASSENGER, and (ii) at least 24 hours in advance, in the case of scheduled impacts on the OPERATION, due to the maintenance or implementation activities of the VENTURES and INTERVENTIONS.
- 16.4. The CONCESSIONAIRE shall follow rules for the protection and defense of PASSENGERS of public services and the institution of an ombudsman, according to State Law No. 10,294, of April 20, 1999 and Federal Law No. 13,709 of August 14, 2018 (General Data Protection Law - LGPD).
- 16.5. If the CONCESSIONAIRE, observing the provisions of the applicable law and regulations, the CONTRACT and its EXHIBITS, implements, at its own risk, transportation by COMPLEMENTARY SERVICE for access to the SERVICES, procedures for this complementation shall be established, presenting them to ARTESP, when requested.
- 17. CLEANING CONDITIONS**
- 17.1. The CONCESSIONAIRE shall keep the stations and their facilities and equipment for public use strictly clean, including the external and internal parts of the trains, as well as the elevators and tracks.
- 18. CONDITIONS OF COMFORT AND CONVENIENCE FOR PASSENGERS**
- 18.1. To ensure the comfort, convenience and safety of all PASSENGERS on trains, stations and other facilities linked to the provision of the SERVICE, the CONCESSIONAIRE shall prohibit PASSENGERS from performing the acts prohibited according to EXHIBIT III.E.

PART II - MAINTENANCE GUIDELINES

1. GENERAL GUIDELINES:

- 1.1 The mandatory maintenance guidelines are based on the RAMS concept, the details of which are described in CENELEC standards 50126, 50128 and 50129. These guidelines shall be followed in all asset upgrades, rebuilds, replacements and/or installations. The Technical/Economic Life Cycles (Life Cycle Cost) of the assets that will be modernized, rebuilt, replaced and/or installed must be explicitly defined.
- 1.2 All assets shall be maintained by the CONCESSIONAIRE in such a way that at least five (5) years of useful life remain after the end of the CONCESSION.
- 1.3 The MAINTENANCE PLANS must be reviewed annually, maintaining the timeliness of the processes and technologies used, as well as the improvement of the methods used in the maintenance activities.
- 1.4 If the CONCESSIONAIRE acquires new assets during the CONCESSION, they must present a MAINTENANCE PLAN.

2. MAINTENANCE IN THE PRE-OPERATIONAL PHASE

- 2.1. In the PRE-OPERATIONAL PHASE, the CONCESSIONAIRE will be given the list with the dates of the last maintenance carried out on each system, equipment and installation of the operational section, as well as the technical guarantees of the EXISTING INFRASTRUCTURE, if any.
- 2.2. The documentation of the last maintenance, provided by ARTESP, referring to the current stretches of LINES 11 (Palmeiras-Barra Funda – Estudantes), 12 (Brás – Calmon Viana), 13 (Engenheiro Goulart – Aeroporto-Guarulhos) and the AIRPORT EXPRESS SERVICE (Palmeiras-Barra Funda – Airport-Guarulhos), should be considered as an information base for the elaboration and implementation of a management system, compatible with the CMMS, made available to ARTESP, with all the data that: (i) enable the traceability of events and the history of systems, equipment and their components, maintenance vehicles and rolling stock; and (ii) include activities carried out in the field – stations, tunnels, viaducts, special engineering works, complexes, maintenance bases, yards and other facilities and activities carried out in the workshop, whether internal or external to the CONCESSIONAIRE.
- 2.3. ARTESP, during the PRE-OPERATIONAL PHASE, will deliver to the CONCESSIONAIRE the available documentation received from CPTM's suppliers, related to systems, ROLLING STOCK, AERIAL TRACTION NETWORK, PERMANENT TRACK and civil works of the LINES and the AIRPORT EXPRESS SERVICE and, based on this documentation, the CONCESSIONAIRE shall:
 - 2.3.1. Provide all additional resources necessary for the maintenance of systems, equipment, facilities, structures and buildings (in particular: technical documentation, training,

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

spares, tools and special devices);

2.3.2. Prepare Maintenance Manuals, including:

- 2.3.2.1. Field Maintenance Manuals that contain descriptions of the operation of the equipment's hardware, in sufficient detail for autonomous learning of its operation. The manuals must also contain analysis in the Fault Tree model that allow corrective maintenance by replacing modules and necessary adjustments. They must also contain information about measurement points, expected waveforms of input and output of the modules, protocols, as well as specification of all material resources necessary for maintenance activities such as: special instruments and tools, accessories, special devices, test jigs, analyzers and whatever else is necessary for the development of preventive maintenance activities, corrective and predictive;
- 2.3.2.2. Workshop Maintenance Manuals that must contain electrical schematics, single-line and descriptive diagrams of the operation of the *hardware* of the modules, with sufficient detail for autonomous learning of their operation. They should contain information about the signal measurement points, as well as expected waveforms and protocols. They must also describe all the resources necessary for their repairs, such as test devices, special tools, accessories, special analyzer devices, instruments and other resources not listed that are required for maintenance activities in the workshop;
- 2.3.2.3. Software manuals that must contain flowcharts and detailed descriptions of the operation of all *software* developed and installed, with details of the existing subroutines, so that the behavior of the equipment is completely analyzed; applies to software universally considered as "off-the-shelf", such as the Windows Operating System, for example, only when necessary for its understanding; and
- 2.3.2.4. The systems, equipment, installations and structures must be maintained in such a way as to always be in accordance with the original project, except for changes that over time have been approved by ARTESP, having preserved their state of physical conservation, their functional and operational aspects.

2.4. The CONCESSIONAIRE must have, at least, the maintenance resources and tools listed below:

- i. Spares for all systems and equipment;
- ii. Special tools and devices, as per maintenance requirements;
- iii. Software tools required by the control and maintenance execution processes;

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

- iv. Documents of all communication protocols, open or not;
 - v. Manuals and documents related to and necessary for the development of maintenance processes;
 - vi. Mechanical, electromechanical and electronic instruments required by maintenance processes;
 - vii. Testing devices required by maintenance processes;
 - viii. Maintenance vehicles required by maintenance processes; and
 - ix. Support equipment required by maintenance processes.
- 2.5. In all existing stations, as well as other buildings and right-of-way, it is a general rule of maintenance and conservation that these are, whenever necessary, renovated, adequate, or rebuilt, in order to ensure their operability and functionality, their conservation and cleanliness both in visual aspects and in aspects of safety, comfort, convenience, accessibility and usefulness for users, employees and PASSENGERS, observing all the mandatory items of this EXHIBIT and EXHIBIT III.B.
- 2.6. The conservation and maintenance of structures and buildings in general include:
- 2.6.1. OPERATING RANGE:
 - 2.6.1.1. Pruning of the vegetation covering along the entire length of the roads, in the entire area of the grassy medians and on the sides of the roads, from the outer edge of the rails to the limit of the OPERATIONAL RANGE. At all level intersections, operational and support buildings and courtyards, and monuments, manual and mechanized pruning of the vegetation covering must be done up to the limit of the OPERATIONAL RANGE;
 - 2.6.1.2. Execution of general cleaning (including debris, solid waste and debris) of ROADS, and on the sides of the OPERATIONAL STRIP;
 - 2.6.1.3. Removal of graffiti throughout the OPERATIONAL RANGE;
 - 2.6.1.4. Pruning and removal of trees and shrubs that pose a safety hazard (dead/dry individuals, at risk of falling or disposed of in an area of imminent risk) or that compromise the drainage system. The other isolated tree individuals whose suppression is restricted by the current legislation, must have the suppression requested from CETESB within the scope of the specific

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

licensing, and must be protected by road containment devices until their authorization is issued;

- 2.6.1.5. Removal of any obstacles that pose a danger to the safety of the SERVICES or PASSENGERS or that compromise the drainage system; and;
- 2.6.1.6. Revitalization of existing fences (fences, walls, barriers and fences) at the limit of the OPERATIONAL RANGE.

2.6.2. Structures and buildings:

- 2.6.2.1. Continuous preventive conservation and corrective conservation of structures and buildings, such as stations, complexes, maintenance bases and yards, in order to keep them in full operating condition.
- 2.6.2.2. Conservation and maintenance of structures and buildings, providing for the replacement and/or repair of structures, waterproofing and roofs that constitute the built areas, their masonry and coatings;
- 2.6.2.3. Conservation of streets, gardens, garbage collection areas and free areas;
- 2.6.2.4. Conservation of frames, locks and glass, maintenance of painting;

2.6.3. Hydraulic and drainage systems:

- 2.6.3.1. Maintenance of hydraulic parts and crockery;
- 2.6.3.2. Conservation and cleaning of wet areas;
- 2.6.3.3. Conservation, replacement and/or repair of hydraulic and sewage installations and, eventually, deep wells for supply;
- 2.6.3.4. Cleaning of septic tanks and maintenance of infiltration ditches;
- 2.6.3.5. Unclogging of culverts and surface drainage elements;
- 2.6.3.6. Repairs of drainage elements (including the elimination of drainage elements that are configured as a fixed obstacle in the safe free area, such as inspection boxes, gutters, etc.); and
- 2.6.3.7. Placement/recomposition of grills and caps of collection boxes.

2.6.4. Visual communication:

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

- 2.6.4.1. Adequacy and conservation of visual communication elements in stations and civil works;
- 2.6.4.2. Replacement of damaged or damaged elements due to vandalism;
- 2.6.4.3. Renovation of signs, maps and informative graphic elements of the metropolitan transport network or related elements that serve to inform the user

2.7. The CONCESSIONAIRE will be responsible for the conservation and maintenance of all stations served by the LINES, including the stations of integration with other metro-rail lines, observing the provisions of EXHIBIT III.C. The entire area of the Brás and Luz stations under the responsibility of CPTM will be the responsibility of the CONCESSIONAIRE, including the platforms that serve the services of Line 10-Turquesa. Likewise, the responsibility for conservation and maintenance in all areas of the future Bom Retiro station will be the responsibility of the CONCESSIONAIRE, as shown in the table below.

STATION	SITUATION	CONSERVATION AND MAINTENANCE RESPONSIBILITY	METRO-RAIL INTEGRATIONS
Palmeiras-Barra Funda	Existing station	CONCESSIONAIRE, VIAMOBILIDADE, CONCESSIONÁRIA TIC TRENS S.A and METRÔ	Subway lines: - 3-Vermelha Railway lines: - 7-Rubi - 8-Diamante - TIC EIXO NORTE (future)
Bom Retiro	Mandatory investment	DEALERSHIP	Railway lines: - 10-Turquesa
Luz	Existing station	CONCESSIONAIRE and METRÔ	Subway lines: - 1-Azul - 4- Amarela Railway lines: - Service 710 (will be discontinued after expansion of LINE 11 to Palmeiras-Barra Funda) - 10-Turquesa (as soon as 710 service is discontinued)
Pari	Contingent investment	CONCESSIONAIRE and METRÔ	Subway lines: - 19-Celeste (future) Railway lines: - 10-Turquesa

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

STATION	SITUATION	CONSERVATION AND MAINTENANCE RESPONSIBILITY	METRO-RAIL INTEGRATIONS
Brás	Existing station	CONCESSIONAIRE and METRÔ	Subway lines: - 3-Vermelha Railway lines: - Service 710 (will be discontinued after expansion of LINE 11 to Palmeiras-Barra Funda) - 10-Turquesa
Tatuapé	Existing station	CONCESSIONAIRE and METRÔ	Subway lines: - 3-Vermelha
Penha	Investment by Metrô-SP	CONCESSIONAIRE and METRÔ	Subway lines: - 2-Verde - 3-Vermelha
Corinthians-Itaquera	Existing station	CONCESSIONAIRE and METRÔ	Subway lines: - 3-Vermelha Railway lines: - 14-Onyx (Future)
Gabriela Mistral	Investment by Metrô-SP	CONCESSIONAIRE and METRÔ	Subway lines: - 2-Verde (future)
São Miguel Paulista	Existing station	CONCESSIONAIRE and future Concessionaire responsible for the operation and maintenance of Line 14-Onyx	Railway lines: - 14-Onyx (Future)
Bonsucesso	Mandatory investment	CONCESSIONAIRE and future Concessionaire responsible for the operation and maintenance of Line 14-Onyx	Railway lines: - 14-Onyx (Future)

2.8. ARTESP will forward, during the PRE-OPERATIONAL PHASE, the occurrences and open failures that appear in the CPTM maintenance system. These occurrences and failures must be closed and corrected by the CONCESSIONAIRE, not constituting a pending issue on the part of the GRANTING AUTHORITY and will not result in economic and financial rebalancing of the CONTRACT, and the CONCESSIONAIRE is responsible for analyzing the data received and treating it.

3. MAINTENANCE PLAN

3.1. The CONCESSIONAIRE shall prepare and implement, for all systems, equipment, facilities and structures, preventive/predictive MAINTENANCE PLANS, to be complied with, and which contain the maintenance activities, respective periodicities, maintenance routes and procedures, list of the human and material resources necessary, so that the specified RAMS performance is obtained. This MAINTENANCE PLAN must be consistent with the

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

recommendations of the respective manufacturers and/or suppliers of each equipment and system, as well as with the technical guarantees of the EXISTING INFRASTRUCTURE.

- 3.2. For rolling stock, the MAINTENANCE PLANS of the manufacturers of the current trains, contained in the appendix of EXHIBIT II.F, and of any new trains, must be revised in order to achieve the specified RAMS performance.
- 3.3. All MAINTENANCE PLANS and their execution may be audited by ARTESP, directly or with the help of TECHNICAL SUPPORT, as well as by the INDEPENDENT VERIFIER, at any time, including through independent auditing companies, if ARTESP deems it necessary.
- 3.4. The MAINTENANCE PLANS must provide for the existence of registration and measurement of the "as-built" model of the conditions of civil structures, according to the guidelines of EXHIBIT II.A, to be updated every 5 (five years), and provide for periodic inspections, respecting the technical standards in force.
- 3.5. The MAINTENANCE PLANS must contain, at least, the description of the objective, goal and action of each maintenance activity, by component, equipment or object, as well as the initial and final deadlines of each maintenance activity;
- 3.6. The CONCESSIONAIRE shall make available to ARTESP the detailed weekly schedule of the execution of the activities of the MAINTENANCE PLANS, after the beginning of the COMMERCIAL OPERATION, at least one (1) week in advance of the activities to be carried out.
- 3.7. The MAINTENANCE PLANS must point out the maintenance interventions by level and by type of maintenance, segmenting them into the following classifications:
 - 3.7.1. Preventive Maintenance;
 - 3.7.2. Corrective Maintenance;
 - 3.7.3. Predictive Maintenance;
 - 3.7.4. Evolutionary Maintenance.
- 3.8. The MAINTENANCE PLANS must be prepared within one (1) year after the receipt of the assets and goods by the CONCESSIONAIRE, and must be submitted to the INDEPENDENT AUDITOR's APPROVAL and no objection by ARTESP.
- 3.9. The MAINTENANCE PLANS must be reviewed at least every 1 (one) year, indicating the changes or alterations proposed for maintenance activities, periodicity of preventive maintenance and modernization of processes that may occur.
- 3.10. In addition, the MAINTENANCE PLANS shall provide for annual activities for the preparation of

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

the Engineering Performance Report, which shall be executed for the fleet of ROLLING STOCK, signaling, energy and telecommunications systems, PERMANENT TRACK and AERIAL TRACTION NETWORK, separately for each one.

4. MAINTENANCE LEVELS

4.1. Maintenance must be organized in at least 3 levels:

- i. Level 1 - consisting of maintenance activities in the field;
- ii. Level 2 - consisting of laboratory and workshop maintenance activities; and
- iii. Level 3 – consisting of specialized support activities provided directly by the factory.

4.2. Maintenance interventions are divided according to their levels of depth and complexity. The following table defines the maintenance levels that the system must consider to ensure the full operability of the systems.

Table 4 - Maintenance levels

Level	Intervention	Intervention site
Level 1	Preventive and corrective maintenance of on-site spare parts and scheduled procedures for cleaning, calibration and/or minor interventions.	On site.
Level 2	Maintenance in workshop and specialized laboratory for recovery of modules at an electronic level.	Maintenance workshop.
Level 3	High-level technical support, especially in aspects related to system software and firmware and diagnosis of recurring hardware problems.	Factory or facilities of the original manufacturers of the products.

5. PREVENTIVE MAINTENANCE

- 5.1. Preventive Maintenance will include actions that are carried out according to predetermined criteria, in order to reduce the probability of failure of the equipment and facilities involved, considering: the manufacturer's specifications, observed behavior of the equipment, factors to which they are exposed (such as environmental conditions, public flow, vibrations and others). The actions will be programmed by applying the criteria that will determine the periods between each maintenance and the level of intervention to be carried out.
- 5.2. Preventive maintenance will be carried out according to the monthly schedule that the supplier or the CONCESSIONAIRE must present in advance.
- 5.3. To these monthly programs must be added the interventions that are necessary, as a result of a predictive maintenance inspection, as well as pending maintenance, which, having been scheduled, were not previously carried out, due to the responsibility of the supplier or the

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

CONCESSIONAIRE.

- 5.4. Once the monthly schedule is agreed, the supplier or the CONCESSIONAIRE will be obliged to carry out the work described therein.
- 5.5. Preventive Maintenance must check all relevant equipment for the proper functioning of the systems.

6. CORRECTIVE MAINTENANCE

- 6.1. It includes the actions taken to restore the operating conditions of a piece of equipment after a failure occurs. The intervention is carried out by a specialized and trained technician, and after it the defective equipment must be restored to its original characteristics. It generally consists of three stages:
 - i. Location of the fault and its diagnosis;
 - ii. Temporary or permanent status, with or without modification. This will imply in most cases the immediate replacement of the equipment subject to failure and subsequent analysis and repair in the laboratory/workshop; and
 - iii. Control of proper functioning and guarantee of operational continuity.
- 6.2. The purpose of this maintenance is to correct, on site or in the laboratory/workshop, any type of reported failure. Such faults must be dealt with immediately, according to the stipulated priority and in accordance with all standards and procedures.
- 6.3. In cases of repeated failures (more than 2 consecutive failures in a period of 15 days or 3 in a period of 30 days in the same equipment and attributed to the same cause), without being possible to correct them, an investigation will be carried out to determine the specific causes, their origins and consequences, which will include the analysis and the proposed solution (Action Plan). resulting in the preparation of a specific technical report.

7. PREDICTIVE MAINTENANCE

- 7.1. It is defined as that which is generated from the analysis of statistical data, obtained from measurements and inspections, in order to anticipate any failures or breakdowns.

8. EVOLUTIONARY MAINTENANCE

- 8.1. It is defined as that which is intended to keep software components updated and stable, in accordance with the natural evolution of technology and applicable standards and regulations.

9. ENGINEERING PERFORMANCE REPORT

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

- 9.1. It is defined as the monitoring report of the maintenance and performance activities of the assets managed by the CONCESSIONAIRE, and must present the following minimum information:
- i. Preventive maintenance history: scheduled and carried out production of maintenance activities; table of 12 months of the current year and previous years, with the quantities of maintenance; chart showing what was planned and carried out; and table of the periodicity of Interventions and maintenance cycle;
 - ii. Failures and occurrences: indication of graphs, tables and demonstration of the calculation of the total failures, by level, of the last 12 months and accumulated for each system, subgroup or component, with a trend line; total identified and undetected failures, by level, in the last 12 months, with a trend line; and total closed failures with pending issues and with open service orders in the last 12 months, with a trend line;
 - iii. Maintainability: indication of graphs, tables and demonstration of the calculation of indicators such as Average Access Time per occurrence (MMTA); Mean Time to Repair (MTTR) and Mean Time to Release per occurrence (MTTL) and other parameters presented in NBR 5462;
 - iv. Reliability: indication of graphs, tables and demonstration of the calculation of indicators such as average failure rate and average failure intensity, according to NBR 5462 parameters; and graphs of the evolution of the MKBF by level of failure and fleet of the last 12 months, and trend line (applicable only to rolling stock);
 - v. Availability (applicable only to rolling stock): graphs of the evolution of availability in the PEAK PERIOD and in the VALLEY PERIOD by fleet, average monthly availability of the fleet and total of immobilized trains of the fleet, in the last 12 months, with information on the target and trend line for each of the parameters;
 - vi. Indexes and general information: graphs of passengers affected by month and by system; information on technical pending issues; control of improvements and fumigation (applicable only to rolling stock); and other information that the CONCESSIONAIRE deems necessary.

10. INSPECTION AND TERMINATION OF THE CONCESSION

- 10.1 ARTESP or the body/entity designated by it shall carry out an inspection every five (5) years, counted from the date of commencement of the COMMERCIAL OPERATION, or in a shorter time, if it so wishes, as it deems necessary for the inspection of the CONCESSION, in the CONCESSION ASSETS, in order to evaluate the operational conditions of the assets to be reverted at the end

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

of the CONCESSION.

- 10.2 To support the inspection work, the CONCESSIONAIRE shall submit, at least ninety (90) days in advance, cumulative reports for monitoring failures of all systems and rolling stock, consisting of:
- i. Inspection and analysis and monitoring system for civil structures;
 - ii. Inspection system, analysis and monitoring of the geometry of the PERMANENT TRACK and the reliability of its components; and
 - iii. Reliability monitoring system of the ROLLING STOCK, OVERHEAD TRACTION NETWORK, signaling and its equipment/components, in addition to other systems and facilities granted.
- 10.3 The necessary spares provided for in item 2.4 of PART II of this EXHIBIT are not to be confused with those identified in the tables/lists contained in EXHIBIT I, which will be delivered to the CONCESSIONAIRE at the beginning of the COMMERCIAL OPERATION. Such goods, detailed/measured in the tables/lists contained in the aforementioned EXHIBIT, are consumables, working materials, assets, special tools and spares, and such tables/lists will be updated until the FINAL ACCEPTANCE TERM, as explained in the item itself. These are support items for the beginning of the COMMERCIAL OPERATION and will also be returned in the manner explained in EXHIBIT I.
- 10.4 The "measurement of spare parts", provided for in item 2.4 of PART II of this EXHIBIT, involving the definition of the items and their quantities shall:
- i. comply with the methodology established by the INDEPENDENT AUDITOR and validated and applied by the PARTIES, within six (6) months prior to the milestone set for the termination of the AGREEMENT;
 - ii. use as a criterion the average history of consumables and working materials used by the CONCESSIONAIRE in the two (2) years prior to the term defined in item (i); and
 - iii. verify that the quantity identified in criterion (ii), for the turning materials, is compatible with the *MTBF-Mean Time Between Failures* and *MTTR-Mean Time To Repair* of each item.
 - iv. The CONCESSIONAIRE shall revert to ARTESP the spare parts resulting from the "measurement of spare parts", observing, as a minimum limit, those referred to in item 2.3, even if these are in a quantity greater than that considered necessary, in the "measurement of spare parts", for the subsequent 5 (five) years of maintenance after the end of the CONTRACT.

SPI PROCESS nº 021.00000891/2024-87
INTERNATIONAL COMPETITION No. 02/2024
PPP LOTE ALTO TIETÊ

- 10.5 At the end of the CONCESSION, and pursuant to EXHIBIT III.G, the CONCESSIONAIRE shall transfer to ARTESP all items of resources, spare parts, complete and updated technical documentation, infrastructures, assets, maintenance tools and instruments, software used in the programmable components of the equipment, *maintenance and monitoring software of the equipment and software*"management of maintenance processes, all updated, functional and in full conditions of use, as well as the equipment listed in item 7, Part I of EXHIBIT I.