



# **Exhibit 6 - Performance Assessment System**

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## 1 Foreword

Below is the description of the methodology to be used by the Grantor to Assess the Performance of the Concessionaire in fulfilling the Concession Agreement, based on performance indicators.

This exhibit also defines the discount over the Consideration of the Concessionaire based on its performance, should it not achieve the goals set out.

Therefore, the Performance Score applied to the Monthly Consideration for Operation added to the Monthly Consideration of Investment will produce an Effective Consideration, whose amount will be equal to or less than the sum of the previous considerations, depending on the indicator obtained.

## 2 Rationale for and Description of the Assessment Procedure

Assessment of the Performance of the Concessionaire will be conducted based on Performance Indicators, which will result in the application of Annual Performance Scores, pursuant to the criteria set out herein.

In Assessing the Performance of the Concessionaire, the Grantor shall be supported by an Independent Auditor, who, for this task, will rely on full cooperation of the Concessionaire, whether in relation to the timely provision of the required information and data or of unrestricted access to all facilities of the Light Rail Vehicle - VLT.

The Concessionaire shall implement an Electronic Performance Measurement System (*Sistema Informatizado de Apuração de Desempenho - SIAD*), duly integrated with the Operations Control Center and with VLT's Maintenance Center, that enables the Grantor and the Independent Auditor to have full and unrestricted remote access. If the Independent Auditor deems the supporting evidence presented by the Concessionaire insufficient or inconsistent for the calculation of the performance indicators, the activities to which this information refers may be deemed unsatisfactory or not executed, which may result in lower indicators and in the application of discounts to the Monthly Consideration for Operation.

The General Annual Performance Indicator (*Indicador Geral de Desempenho Anual - IGDA*) may affect the amount to be paid by the Grantor to the Concessionaire as Monthly Consideration for Operation.

Any eventual discounts applied to the amount of the Consideration arising from the application of the IGDA shall not be interpreted as a contractual penalty. Therefore, the Assessment of the Performance of the Concessionaire should not affect the assurance, by the Grantor,

of any breach of contract and the subsequent application of the penalties set forth in the Agreement and its Appendices.

### 3 Rationale for Calculation of the General Annual Performance Indicator (IGDA)

The Performance Assessment shall be conducted immediately after the VLT becomes Fully Operational; however, the application of IGDA to the Monthly Consideration for Operation shall only occur one year after the beginning of the assessment.

The performance of the Concessionaire shall be assessed annually, and data pertaining to this analysis shall be collected as frequently as set forth herein. This performance assessment shall be based on the General Annual Performance Indicator (IGDA), which will consider the previous twelve months, so as to eliminate or minimize seasonal effects, and which could cause, among others results, the reduction of the Monthly Consideration for Operation to be paid to the Concessionaire in the twelve months following the assessment.

IGDA will rank the Performance of the Concessionaire, as set out in Table 1 of this Exhibit.

Table 1 - Performance Score

IGDA Values	Performance Rating
$IGDA \geq 9.00$	Fully satisfactory
$8.00 \leq IGDA < 9.00$	Satisfactory
$7.00 \leq IGDA < 8.00$	Marginally satisfactory
$IGDA < 7.00$	Unsatisfactory

If the Concessionaire receives a “Satisfactory” rating for three consecutive years; a “Marginally Satisfactory” rating for two consecutive years; or an “Unsatisfactory” rating in any given year, it shall present to the Grantor, within a period of not more than 60 (sixty) days, an action plan to reach a “Fully Satisfactory” rating in the following year.

#### 4 Rationale for the Applicability of the General Annual Performance Indicator (IGDA) to the Amount of the Consideration

The IGDA of a given year will determine the amount of the consideration that will effectively be received by the Concessionaire in the following year, after the reduction factors are applied to the Monthly Consideration for Operation, as set forth herein and shown in Table 2.

Table 2 - Amounts of the effective consideration (contraprestação efetiva - CE, in relation to the Monthly Consideration for Operation (Contraprestação Mensal de Operação - CMO), plus the Monthly Consideration of Investment (Contraprestação Mensal de Investimento -CMI)

IGDA	Effective consideration (CE) throughout the term of the concession
$IGDA \geq 9.00$	$CE = 1.00 \times CMO + CMI$
$8.00 \leq IGDA < 9.00$	$CE = \leq 0.85 \times CMO + CMI$
$7.00 \leq IGDA < 8.00$	$CE = \leq 0.60 \times CMO + CMI$
$IGDA < 7.00$	$CE = \leq 0.30 \times CMO + CMI$

The IGDA will be applied to agreed-upon consideration for each monthly payment made by the Grantor to the Concessionaire, in this item, pursuant to the general logic provided in Table 2.

#### 5 Measurement Periods and Hours

For the general purpose of measuring performance indicators, Table 3 lists the respective monitoring periods and hours, considering: business days; Saturdays, Sundays, and holidays; and special event dates.

Table 3 - Indicator measurement periods and hours

Period	Business days	Saturdays	Sundays and holidays	Special event dates
Morning peak hours	7:00 - 8:00		Not applicable	Peak and off-peak hours defined by the Grantor
Afternoon peak hours	5:00 - 6:00	Not applicable	5:00 - 6:00	
Morning off-peak	10:00 - 12:00			
Afternoon off-peak	12:00 - 16:00			
Evening peak hours	8:00 - 9:00 and 11:00 - 12:00			

Business days also include the days between national, state, or local holidays in Salvador and Simões Filho, whether between public holidays or between public holidays and weekends; they also include the “optional holidays” established by the state or local governments (Salvador and Simões Filho).

Special events will be established by the Grantor, which, in turn will notify the Concessionaire of their occurrence or schedule at least 30 (thirty) days in advance, which includes the matters concerning the new peak and off-peak hours, pursuant to the main logic presented in Table 3.

For the purpose of measuring performance, it is hereby established that the sum of special event dates that do not fall on business days should not exceed 12 (twelve) days per year.

## **6 General Monthly Performance Indicator**

The General Performance Indicator (IGD) will be obtained based on the measurement of Performance Indicators distributed in four analysis groups, as follows:

$$\text{IGD} = 0.3 \cdot \text{IGSU} + 0.4 \cdot \text{IGRO} + 0.2 \cdot \text{IGSE} + 0.1 \cdot \text{IGDS}$$

Where:

- IG SU = General User Satisfaction Indicator
- IG RO = General Operation Regularity Indicator
- IG SE = General Security and Safety Indicator
- IG DS = General System Availability Indicator

The IGD will be calculated monthly, based on the other General Indicators. The General Annual Performance Indicator (IGDA) will be the arithmetic average of the twelve monthly IDG results calculated throughout the year.

All Performance Indicators mentioned herein will be measured on a scale of 0 to 10, and any rounding will follow ABNT standards. The items below describe the formulas and procedures to be used to calculate the Indicators that make up the IGD.

## 6.1 General User Satisfaction Indicator (IGSU)

The General User Satisfaction Indicator (IGSU) should be calculated based on the following formula:

$$\text{IGSU} = \frac{\text{IRU} + \text{ISU}}{2}$$

Where:

IRU = User Complaint Indicator

ISU = User Satisfaction Indicator

### 6.1.1 User Complaint Indicator (IRU)

#### **Objective:**

To monitor spontaneous contacts made by users in order to express their dissatisfaction with the service provided.

#### **Measurement Procedure:**

This indicator will be measured monthly, based on the calculation of the ratio between the number of complaints received in a given month and the total number of passengers (in millions) in the same period.

The calculation should consider all passengers registered by the access control systems, regardless of their origin, destination, and tariff model.

All complaints received should be entered into the Electronic Performance Measurement System (SIAD). The calculation of this indicator should only consider complaints pertaining to the following subjects:

- Services to persons with disabilities or mobility restrictions;
- Circulation of VLT trains;
- Malfunction of internal VLT equipment;
- Malfunction of train station equipment;
- Failure to enforce the use women-only railcars, if any;
- Overcrowding of VLT railcars;
- Excessive time to purchase tickets at ticket counters;
- Lack of speed, convenience, or clarity in accessing the paid area;
- Lack of small change at ticket counters;
- Information and service to users and the community;
- Cleanliness of trains and train stations.

### Formula and thresholds:

This indicator should be calculated using the following formula:

$$IRU = \frac{\frac{LRP - \text{Number of Complaints Received}}{1,000,000 \text{ Passengers Transported}}}{LRP - MRP} * 10$$

Where:

$$LRP = \frac{\text{threshold of Complaints}}{\text{Million Passengers}} = 6$$

$$MRP = \frac{\text{Target Number of Complaints}}{\text{Million Passengers}} = 0$$

$$0 \leq IRU \leq 10$$

### 6.1.2 User Satisfaction Indicator (ISU)

#### Objective:

To assess user satisfaction with the service provided, based on a specific survey.

#### Measurement Procedure:

#### Hiring:

- The service assessment survey should be conducted by an Independent Auditor hired by the Concessionaire, after Grantor's approval.

#### Methodology of the survey:

- The model to be adopted includes a step to determine qualitative data, to be conducted annually, which guides the quantitative survey. This data survey should be conducted by the same institution approved for the service assessment survey.
- The service assessment survey will be carried out with users during their trips.

#### Data collection:

- The assessment starts with users talking about service indicators and ends with their opinions on the overall attribute related to these indicators. Then, overall attributes are prioritized according to the importance given by users in their trip to each one of them.

In order to measure the attributes and the indicators, a five-point Likert scale will be used, as shown in the table below:

Table 4 - Likert Scale

Concept	Qualification
Very poor	1
Poor	2
Average	3
Good	4
Very good	5

**Data treatment:**

The assessment of the attributes and indicators of the service results in proportions for each point of the scale, which yields two indices, that is:

- **Attribute and Indicator Assessment Index:** reports the level of satisfaction in relation to the indicators and attributes surveyed in a range between -100 and +100 – this index is the result of the difference between the sum of the positive (very good and good) and negative proportions (poor and very poor), as per



- Table 5.
- **User Satisfaction Index:** reports the users' level of satisfaction in relation to the overall quality of the service provided by VLT. It is the result of the weighting of the general attributes, such as Comfort and Speed, based on the level of importance assigned by users to each of them, as described in table 6. The weights related to the levels of prioritization used in calculating the IDS, from higher to lower priority, are: P1 = 0.25 (twenty-five hundredths); P2 = 0.20 (twenty hundredths); P3 = 0.15 (fifteen hundredths); P4 = 0.15 (fifteen hundredths); P5 = 0.10 (ten hundredths); P6 = 0.10 (ten hundredths); and P7 = 0.05 (five hundredths).

Table 5 - Measurement Model

General Attributes	Satisfaction Indicators	Indicator assessment index	Attribute assessment index
P1 - Reliability	Time between trains (Headway)	IAI 1	IAA 1
	Number of train stops during a trip	IAI 2	
	Convenience in purchasing tickets	IAI 3	
	Train maintenance and state of repair	IAI 4	
	How fast train resumes operation in the case of stops	IAI 5	
P2 - Comfort	Number of people at train stations	IAI 6	IAA 2
	Number of people on trains	IAI 7	
	Boarding and alighting conditions	IAI 8	
	Cleanliness of trains and train stations	IAI 9	
	Ambient temperature on trains	IAI 10	
	Lighting at train stations	IAI 11	
P3 - Public Security	Actions taken by VLT to prevent robbery on trains	IAI 12	IAA 3
	Actions taken by VLT to prevent theft on trains	IAI 13	
	Surveillance through CCTV	IAI 14	
	Presence of security agents for surveillance and action in case of thefts, etc.	IAI 15	
P4 - Operational safety	Actions taken by VLT to prevent accidents on trains	IAI 16	IAA 4
	Availability of safety equipment in emergency situations	IAI 17	
	Actions taken by VLT to prevent accidents involving train doors, equipment in train stations, etc.	IAI 18	
	Actions to be taken by the company in case of accidents with users	IAI 19	
P5 - Speed	Travel time on board	IAI 20	IAA 5
	Time to pass through turnstiles	IAI 21	
	Waiting time at the stations	IAI 22	
	Time spent to purchase tickets	IAI 23	
P6 - Assistance to users	Employee training and politeness	IAI 24	IAA 6
	Assistance to users with disabilities	IAI 25	
	Availability of channels for the user x company relationship	IAI 26	
P7 - Information to users	Availability of employees to provide assistance to users when necessary	IAI 27	IAA 7
	Understanding of and number of wayfinding signs at stations/stops	IAI 28	
	Availability of information about VLT, integrated systems, and surrounding areas	IAI 29	
	Messages concerning problems on board trains and at stations	IAI 30	
	Campaigns/guidance on how to use the system and on emergency situations	IAI 31	
	Information on ticket types and points of sales	IAI 32	

Table 6 - User satisfaction

Topic	Attribute assessment index	Prioritization of each attribute (1st to 7th)	General satisfaction index (IGS)
Reliability	IAA 1	P1	IGS= sum (IAA 1 to 7 x P1 to P7)
Comfort	IAA 2	P2	
Public security	IAA 3	P3	
Operational safety	IAA 4	P4	
Speed	IAA 5	P5	
Assistance to users	IAA 6	P6	
Information to users	IAA 7	P7	

### Formulas and thresholds:

This indicator should be calculated using the following formula:

$$ISU = \frac{\text{Satisfaction Measured} - \text{Minimum Satisfaction}}{\text{Satisfaction Target} - \text{Minimum Satisfaction}} * 10$$

Where:

$$\text{Satisfaction Measured} = \frac{\sum IAA_n * P_n}{\text{Number of respondents}}$$

IAAn = Proportion of positive assessments (very good and good)  
– Proportion of negative assessments (very poor and poor)

Pn = Factor of the prioritization assigned by users to each attribute of the

service Satisfaction Target = 75

Minimum satisfaction = 60

$$0 \leq ISU \leq 10$$

## 6.2 General Operation Regularity Indicator (IGRO)

The General Operation Regularity Indicator (IGRO) should be calculated using the following formula:

$$IGRO = \frac{ICP + IRI}{2}$$

Where:

ICP = Indicator of Compliance with Programming

IRI = Headway Regularity Indicator

### 6.2.1 Indicator of Compliance with Programming (ICP)

#### Objective:

To monitor compliance with the daily programming concerning the availability of trips.

#### Measurement Procedure:

This indicator will be measured monthly based on the calculation of the average of the ratio between the actual and the programmed number of daily trips. To calculate this indicator, a trip is defined as the complete section from one terminal to another.

#### Formula and threshold:

This indicator should be calculated using the following formula:

$$ICP = \frac{\text{Monthly Average Number of Trips} - LCP}{MCP - LCP} * 10$$

Where:

MCP = Compliance with Programming Target = 1

LCP = Minimum Compliance with Programming Threshold = 0.9

$0 \leq ICP \leq 10$

### 6.2.2 Headway Regularity Indicator (IRI)

#### Objective:

To monitor the regularity and number of seats offered.

#### Measurement Procedure:

To measure this indicator, the ratios between the average headway lasting the appropriate time and the total number of headways registered

between trains daily must be calculated. The indicator will be calculated based on the average of the daily results obtained. A headway will be considered adequate if occurring between 80% and 120% of the specific time programmed for the period.

Headway is defined as the time between the opening of the doors of one train and the opening of the doors of the previous train at a same platform. Headways should be measured at the first station of the busiest inter-station section.

The periods and times in which this indicator will be measured will be peak and off-peak hours, as defined in Table 3 - Indicator measurement periods and times Table 3.

#### **Formula and threshold:**

This indicator should be calculated using the following formula:

$$\text{IRI} = \text{Monthly average of } \left( \frac{\text{Number of headways measured at the adequate time}}{\text{Total number of headways registered}} \right) * 10$$

Where:

Headways are considered adequate when equivalent to a value between 80% and 120% of the time between trains planned for the period.

$$0 \leq \text{IRI} \leq 10$$

### **6.3 General Security and Safety Indicator (IGSE)**

The General Security and Safety Indicator (IGSE) should be calculated based on the following formula:

$$\text{IGSE} = \frac{\text{IAL} + \text{ICC} + \text{IAT}}{3}$$

Where:

IAL = Indicator of Accidents on the Track

ICC = Crime and Misdemeanor Indicator

IAT = Indicator of Traffic Accidents Caused by Conductors

### 6.3.1 Indicator of Accidents on the Track (IAL)

**Objective:**

To monitor the operational safety level of the VLT system.

**Measurement Procedure:**

This indicator will be measured monthly, based on the global ratio between the number of users injured in accidents in the VLT system and the total number of passengers transported each month (in millions).

Passengers transported is defined as the total sum of users passing through turnstiles at the VLT stations.

All accidents that caused injuries to users within the VLT system, and that were caused by the following reasons, among others, must be considered:

- a) Users falling from ramps or stairs (if any) and at stations and on board trains;
- b) Body parts caught in doors, turnstiles, and stairs;
- c) Lower limbs trapped in the gap between train and platform;
- d) Impact of train doors or of other moving parts of trains or stations.

**Formula and threshold:**

This indicator should be calculated using the following formula:

$$IAL = \frac{LAP - \frac{\text{Number of Accidents Recorded}}{1,000,000 \text{ Passengers Transported}}}{LAP - MAP} * 10$$

Where:

$$LAP = \text{Threshold of } \frac{\text{Accidents}}{\text{Million Passengers}} = 3$$

$$MAP = \text{Target } \frac{\text{Accidents}}{\text{Million Passengers}} = 0$$

$$0 \leq IAL \leq 10$$

### 6.3.2 Crime and Misdemeanor Indicator (ICC)

**Objective:**

To monitor the level of public security of the VLT system.

**Measurement Procedure:**

This indicator will be measured monthly based on the number of crimes and misdemeanors involving users and employees of the Concessionaire in the VLT system (on board trains and at stations) and the total number of passengers transported each month (in millions).

“Passengers transported” is defined as the total sum of users passing through turnstiles at the VLT stations.

**Formula and threshold:**

This indicator should be calculated using the following formula:

$$ICC = \left( 0.2 * \frac{LCE - QCE}{LCE - MCE} + 0.8 * \frac{LCT - QCT}{LCT - MCT} \right) * 10$$

Where:

$$LCE = \frac{\text{Threshold of Crimes at Stations}}{\text{Million Passengers}} = 3$$

$$MCE = \frac{\text{Target Number of Crimes at Stations}}{\text{Million Passengers}} = 0$$

$$QCE = \frac{\text{Number of crimes registered at stations}}{\text{Number of passengers transported}/1,000,000}$$

$$LCT = \frac{\text{Threshold of Crimes On Board Trains}}{\text{Million Passengers}} = 3$$

$$MCT = \frac{\text{Target Number of Crimes On Board Trains}}{\text{Million Passengers}} = 0$$

$$QCT = \frac{\text{Number of crimes registered on board trains}}{\text{Number of PAX transported}/1,000,000}$$

$$0 \leq ICC \leq 10$$

### 6.3.3 Indicator of Traffic Accidents Caused by Conductors (IAT)

**Objective:**

To monitor the operational safety level of the VLT system in the traffic of the metropolitan area of Salvador.

**Measurement Procedure:**

This indicator must be measured monthly based on the total number of traffic accidents caused by VLT conductors. Culpability will be determined by an Independent Auditor, based on police reports on accident reports submitted by the Concessionaire.

The assessment of this indicator will be binary: if any traffic accidents were caused by VLT conductors during the reference month, the value of the indicator will be 0 (zero). If no traffic accidents were caused by VLT conductors during the same month, the value of the indicator will be 10 (ten).

**Formula and threshold:**

This indicator should be calculated using the following criteria:

If the number of accidents caused by conductors > 0; IAT = 0

If the number of accidents caused by conductors = 0; IAT = 1

## 6.4 General System Availability Indicator (IGDS)

The General System Availability Indicator (IGDS) should be calculated using the following formula:

$$IGDS = \frac{ISV + IDP + IDV}{3}$$

Where:

ISV = Track System Availability Indicator

IDP = Station Availability Indicator

IDV = Rail System Availability Indicator

### 6.4.1 Track System Availability Indicator (ISV)

**Objective:**

To monitor maintenance and availability of track systems for circulation of VLTs.

**Measurement Procedure:**

This indicator will be measured monthly and calculated using the ratio between the total number of hours during which the track system is available and the total number of hours it is programmed to be available.

The components of the track system to be considered are the signaling system and the ground-train control. The number of hours with the actual and programmed hours of availability will be analyzed for each of these components.

**Formula and threshold:**

This indicator should be calculated using the following formula:

$$ISV = 5 * \frac{\text{Hours of Signaling Available}}{\text{Hours of Signaling Programmed}} + 5 * \frac{\text{Hours Available for Ground-Train Control}}{\text{Hours Programmed for Ground-Train Control}}$$

$$0 \leq ISV \leq 10$$

**6.4.2 Station Availability Indicator (IDP)**

**Objective:**

To monitor maintenance and availability of train stations for passengers and for the operation of VLT.

**Measurement Procedure:**

This indicator will be measured monthly and calculated using the ratio between the total number of hours during which the train stations are available and the total number of hours they are programmed to be available.

A train station will be considered available when it presents the minimum conditions required for normal operations, not risking or affecting the comfort of users or the operation of the system.

**Formula and threshold:**

This indicator should be calculated using the following formula:

$$IDP = \frac{\text{Hours with Stations Available}}{\text{Total Number of Hours of Programmed Availability of Train Stations}} * 10$$

$$0 \leq IDP \leq 10$$

**6.4.3 Rail System Availability Indicator (IDV)**

**Objective:**

To monitor maintenance and availability of rails systems for circulation of trains and the operation of VLT.

**Measurement Procedure:**

This indicator will be measured monthly and calculated using the ratio between the total number of hours during which the rails system is available and the total number of hours it is programmed to be available.

The rail system is considered available when it presents the minimum conditions required for normal operations, not risking or affecting the comfort of users or the operation of the system.

To calculate this indicator, the Concessionaire should first cooperate with the Grantor in order to define the sections of the Rail System that should be available during each period. The unavailability of sections not included in the aforementioned definition will not affect the calculation of this indicator.

**Formula and threshold:**

This indicator should be calculated using the following formula:

$$IDV = \frac{\text{Hours during which the rail system is available}}{\text{Total Number of Hours of Programmed Availability of the Rail System}} * 10$$

$$0 \leq IDV \leq 10$$

## **7 Review of the Performance Assessment System**

As defined in the Concession Agreement, the Grantor and the Concessionaire may, during the review process, perform critical analyses and decide to make changes to the Performance Assessment System, which is the subject matter hereof, constantly seeking, on the one hand, to add more objectivity and simplicity to performance assessment, and, on the other, to provide services to users with the utmost efficiency, efficacy, and effectiveness.