



STATE SECRETARIAT FOR INFRASTRUCTURE AND ENVIRONMENT

ANNEX IV – PERFORMANCE INDICATORS



STATE SECRETARIAT FOR INFRASTRUCTURE AND ENVIRONMENT

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This ANNEX establishes the recording system for the PERFORMANCE INDICATORS associated with the CONTRACT, which shall be employed to assess the CONCESSIONAIRE's performance and, consequently, to determine the VARIABLE GRANT's value.

The form and periodicity of the assessment of the CONCESSIONAIRE's performance are detailed hereunder.

1. ASSESSMENT OF PERFORMANCE

1.1. The CONCESSIONAIRE's performance shall be estimated every 12 (twelve) months based on the following indicators, divided into 4 groups:

▪ MANAGEMENT

- USER and Equity Security Indicator (I_{SU});
- Waste Management and Cleaning Indicator (I_{LR});

▪ LOCAL INTEGRATION

- Local Integration Indicator (I_{IL}).

▪ VISITATION

- Service Quality Indicator (I_{QS});
- Visitor Satisfaction Indicator; (I_{SV}).

▪ MAINTENANCE

- CONCESSION Area and Asset Maintenance Indicator (I_{MA}).

1.2. Without prejudice to any data gathering performed directly by the INDEPENDENT RAPPOREUR, the CONCESSIONAIRE shall provide the INDEPENDENT RAPPOREUR with all the information and documents needed to assess the indicators referenced hereunder. If this requirement is not met, the INDEPENDENT RAPPOREUR shall consider the worst result in the assessment of said indicator(s), reaching a score of zero.

1.3. The INDEPENDENT RAPPOREUR shall justify and show with records (pictures, measurement records, etc.), when applicable, all nonconformities, irregularities or inadequacies that come to be verified.

1.4. Each indicator shall have its annual result estimated, whereas the whole effect of the six indicators shall be referred to as Final Score (NF) and determined with the following equation:

$$NF = 20\% * I_{SU} + 15\% * I_{LR} + 10\% * I_{IL} + 20\% * I_{QS} + 20\% * I_{SV} + 15\% * I_{MA}$$

1.5. The NF estimated annually shall allow for the estimation of the VARIABLE GRANT percentile due by the CONCESSIONAIRE by way of performance compensation, for the following 12 (twelve)-month period.

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- 1.6. The following table shows the relation between the NF and the percentile value to be applied on top of the REVENUE earned by the CONCESSIONAIRE by way of the VARIABLE GRANT payable by the CONCESSIONAIRE in connection with the performance, according to the terms of Clause Thirteen of the CONTRACT:

Final Score (NF)	VARIABLE GRANT
$90 \leq NF \leq 100$	0.50%
$75 \leq NF < 90$	1.00%
$50 \leq NF < 75$	2.00%
$25 \leq NF < 50$	3.00%
$00 < NF < 25$	4.00%
$NF = 00$	5.00%

- 1.7. The INDEPENDENT RAPPOREUR shall assess indicators as established for each indicator, as of the 13th (thirteenth) month following the signing of the TERM OF DELIVERY OF THE PUBLIC ASSET, by either on-site evaluations or inspections, or the examination of reports and documents provided by the CONCESSIONAIRE, except for CONCESSION Areas and Asset Maintenance Indicator (I_{MA}), which shall be subject to the inspection periodicities established under item 7.5 of this ANNEX.
- 1.8. The CONCESSIONAIRE's performance shall be assessed, with the NF , every 12 (twelve) months, based on results obtained between the 13th (thirteenth) and the 24th (twenty-fourth) month after the signing of the TERM OF DELIVERY OF THE PUBLIC ASSET, indicating the amount to be paid in the following year, by way of the VARIABLE GRANT, as of the 25th (twenty-fifth) month after signing of the TERM OF DELIVERY OF THE PUBLIC ASSET, and so on, during the following years.
- 1.9. The calculation method applying to indicators comprising the NF assigned to the CONCESSIONAIRE is detailed in the following sections, provided that rounding-off rules established under the ABNT NBR 5891 standard for decimal numbers is upheld, whereas no algorism shall be maintained after the dot, in estimations of the performance indicators.

2. USER AND EQUITY SECURITY INDICATOR (I_{SU})

- 2.1. The four-monthly assessment of the User and Equity Security Indicator shall consist of the sum total of assessment scores assigned by the INDEPENDENT RAPPOREUR to four elements, as established in the following table:

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USER AND EQUITY SECURITY INDICATOR (I _{SU})						
#	Element	Assessment	Formula - performance indicator	Gradation		NA
Q1	Surveillance stations shall be operational during all predetermined hours	To determine if the CONCESSIONAIRE provides surveillance stations, which shall be operational at all times predetermined under the Equity Security Plan. A station is deemed to be operational when manned with a surveillance officer who is properly equipped, and in uniform, assigned to the appropriate station, during the predetermined times.	$I_{D1} = \frac{\#1 \text{ surveillance stations operational}}{\# \text{ total surveillance stations}} (\%)$	$90\% \leq I_{D1}$	2.0	
				$90\% > I_{D1} \geq 75\%$	1.5	
				$75\% > I_{D1} \geq 50\%$	1.0	
Q2	Fire brigade that is duly qualified to assist with fire prevention and firefighting operations	Corroboration of fire brigade officers' participation in training courses scheduled for the period, upon inspection of lists of attendance and participation/ approval certificates.	$I_{D2} = \frac{\# \text{ fire brigade officers trained}}{\# \text{ total fire brigade officers}} (\%)$	$90\% \leq I_{D2}$	2.0	
				$90\% > I_{D2} \geq 75\%$	1.5	
				$75\% > I_{D2}$	0.0	
Q3	The Fire Department Inspection Records (AVCB) for constructions (requiring them) within the areas must be valid	List establishing the number of constructions within the areas having valid, regular AVCB, and the total number of constructions within the areas requiring AVCB.	$I_{D3} = \frac{\# \text{ constructions with valid AVCB}}{\# \text{ total constructions requiring AVCB}} (\%)$	$100\% = I_{D3}$	2.0	
				$100\% > I_{D3}$	0.0	
Q4	Presence of unaccompanied users in restricted visitation areas	Confirmation of the number of times when the presence of users was identified within restricted visitation areas, where visitation is only allowed when accompanied by members of the CONCESSIONAIRE's team. For assessment purposes, confirmation shall be executed over a period of at least 15 consecutive days, during which any events shall be registered.	$I_{D4} = \# \text{ of events logged during the monitoring period (15 days)}$	$0 = I_{D4}$	2.0	
				$1 \leq I_{D4}$	0.0	
Sum Total - A _{SU}						

¹ For purposes of this ANNEX, the “#” (pound) symbol corresponds to the number quantifying objects and/or the occurrence of events concerning the universe under examination by the INDEPENDENT RAPPORTEUR in order to assess the CONCESSIONAIRE's performance.

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- 2.1.1. The total value of the four-monthly assessment shall range between “0” (zero) and “8” (eight) points, and shall be estimated based on the following equation:

$$A_{SU} = \sum_{1}^n NA_n$$

Where:

A_{SU} = Sum Total of User and Equity Security Indicator assessment scores;

NA_n = Assessment Score for element n , relative to the I_{Dn} assigned by the INDEPENDENT RAPPORTEUR.

The subscribed n indicates the numbering of each of the elements comprising the issues to be assessed with the indicator.

- 2.1.2. The annual A_{SU} shall correspond to the arithmetic mean of the 3 (three) four-monthly assessments executed over a 12 (twelve)-period month.

- 2.1.3. The application of the annual A_{SU} in the gradation table, hereunder, produces the value of the User and Equity Security Indicator (I_{SU}), which shall be used to compute the NF, as described in item 1.5 of this ANNEX.

Valuation	I_{SU}
$A_{SU} > 7$	100
$7 \geq A_{SU} > 6$	90
$6 \geq A_{SU} > 5$	75
$5 \geq A_{SU} > 3$	50
$3 \geq A_{SU}$	0

3. WASTE MANAGEMENT AND CLEANING INDICATOR (I_{LR})

- 3.1. The four-monthly assessment of the Waste Management and Cleaning Indicator shall consist of the sum total of assessment scores assigned by the INDEPENDENT RAPPORTEUR to six elements, as established under the following table:

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WASTE MANAGEMENT AND CLEANING INDICATOR (I _{LR})						
#	Element	Assessment	Formula - performance indicator	Gradation		NA
Q1	Properly functional trash bins for selective garbage collecting	Examination of working conditions of trash bins in the areas: presence of garbage bags, absence of cracks, undamaged covers (when covered trash bins are used), use of appropriate selective colors, proper fixation on bases or supports (according to the trash bin model used). The total “#” of trash bins shall include those in the public restrooms.	$I_{D1} = \frac{\text{\# properly functional trash bins}}{\text{\# total trash bins installed}} (\%)$	$90\% \leq I_{D1}$	2.0	
				$90\% > I_{D1} \geq 75\%$	1.5	
				$75\% > I_{D1} \geq 50\%$	1.0	
				$50\% > I_{D1}$	0.0	
Q2	Trash bins and waste baskets available to receive new waste deposits, without leaks or overflows	Confirmation of the availability of trash bins in the Areas and Glebes, to identify any waste leaks or overflows from the trash bins. This should include the trash bins in the public restrooms.	$I_{D2} = \frac{\text{\# trash bins available for use}}{\text{\# total trash bins installed}} (\%)$	$95\% \leq I_{D2}$	2.0	
				$95\% > I_{D2} \geq 90\%$	1.5	
				$90\% > I_{D2}$	0.0	
Q3	Appropriate locations for to store waste collected from the areas until it can be retrieved by the public collection services	Confirmation of the existence and availability of proper locations for the storage (available volume and installation) of waste collected from the areas, until their retrieval by the public collection services.	$I_{D3} = \frac{\text{\# appropriate storage locations}}{\text{\# total storage locations}} (\%)$	$100\% = I_{D3}$	2.0	
				$100\% > I_{D3}$	0.0	
Q4	Frequency of cleaning and sanitation of public restrooms (frequency of cleaning activities and replacement of disposable materials)	Determination of the execution level of services (via systemic recording) within the periodicities defined in the operating plan for cleaning services and the proper replacement of disposable materials. Nonconformities (NC) shall be computed identifying any failure to adhere to the activities schedule or to meet unscheduled demands. The inspection shall be	$I_{D4} = \text{total \# NC identified in all areas}$	$1 \geq I_{D4}$	2.0	

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		executed during at least 6 operating days (open to the public), consecutive or alternating, limited to a period of no more than 30 consecutive days. Inspections shall be executed at least every 4 hours, during the course of the full operating day of the restrooms in the areas. The 6 inspection days shall cover all operating days of the week (ranging from Monday through Sunday).		$1 < I_{D4}$	0.0	
Q5	Public restrooms should rely on appropriate supply / replacement of personal hygiene products (soap, toilet paper, paper towels and/or and driers)	Technical inspection executed by a specialized professional (under the supervision of the INDEPENDENT RAPPOREUR), qualifying the cleanliness and hygiene level based on performance rates from 1.0 to 5.0, where 1.0 represents the lowest quality and 5.0 represents the highest quality. The inspection shall be executed at least on 6 operating days (open to the public), consecutive or alternating, limited to a period of no more than 30 consecutive days. Inspections shall be executed at least every 2 hours, during the course of the full operating day of the areas. The 6 inspection days shall cover all operating days of the week (ranging from Monday through Sunday).	$I_{D5} = 1.0 \text{ to } 5.0 \text{ (resolution of } 0.5)$	$4.0 \leq I_{D5}$	2.0	
				$4.0 > I_{D5} \geq 3.0$	1.5	
				$3.0 > I_{D5} \geq 2.0$	1.0	
				$2.0 > I_{D5}$	0.0	
Q6	Green area maintenance	Identification of nonconformities (NC) in land clearing services executed on grasses, gardening services, or identification of fallen branches or leaves in a volume that affects the use and circulating areas, or the absence of pruning services on bushes and trees located near the constructions or the electrical system. Inspections shall be executed during a period of up to 2 consecutive days for all areas, and cover only circulating areas, except for trails and areas reserved	$I_{D6} = \# \text{ NC identified during inspection}$	$1 \geq I_{D6}$	2.0	
				$1.0 > I_{D6} \geq 3.0$	1.5	
				$3.0 > I_{D6} \geq 5.0$	1.0	



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		to visitors and users, and landscape areas (gardens, planting beds).		5.0 > I _{D6}	0.0	
Sum Total - A _{LR}						

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- 3.1.1. The total value of the four-monthly assessment shall range between “0” (zero) and “12” (twelve) points, and shall be estimated based on the following equation:

$$A_{LR} = \sum_{1}^n NA_n$$

Where:

A_{LR} = Sum Total of Waste Management and Cleaning Indicator assessment scores;

NA_n = Assessment Score for element “n”, relative to the I_{Dn} assigned by the INDEPENDENT RAPPORTEUR.

The subscribed n indicates the numbering of each of the elements comprising the issues to be assessed with the indicator.

- 3.1.2. The annual A_{LR} shall correspond to the arithmetic mean of the 3 (three) four-monthly assessments executed over the 12 (twelve)-month period.
- 3.1.3. The application of the annual A_{LR} in the gradation table, hereunder, produces the value of the Waste Management and Cleaning Indicator (I_{LR}), which shall be used to compute the NF, as described under item 1.5 of this ANNEX.

Valuation	I_{LR}
$12 \geq A_{LR} > 10$	100
$10 \geq A_{LR} > 8$	90
$8 \geq A_{LR} > 6$	75
$6 \geq A_{LR} > 4$	50
$4 \geq A_{LR} > 2$	25
$2 \geq A_{LR}$	0

4. LOCAL INTEGRATION INDICATOR (I_{IL})

- 4.1. The four-monthly assessment of the Local Integration Indicator shall consist of the sum total of assessment scores assigned by the INDEPENDENT RAPPORTEUR to three elements, as established under the following table:

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LOCAL INTEGRATION INDICATOR (I _{IL})						
#	Element	Assessment	Formula - performance indicator	Gradation		NA
Q1	Qualification of residents from surrounding neighborhoods on environmental conservation and conservation units	To determine if the CONCESSIONAIRE offers registered neighboring residents at least 20% of all available places in the qualification course, per year. The CONCESSIONAIRE shall corroborate the offering of training courses by advertising the training course by electronic means and at the Park's facilities.	$I_{D1} = \frac{\# \text{ Places reserved for residents from neighboring areas/year}}{\# \text{ Places Available/year}} (\%)$	$20\% \leq I_{D1}$	2.0	
				$20\% > I_{D1} \geq 15\%$	1.5	
				$15\% > I_{D1} \geq 10\%$	1.0	
				$10\% > I_{D1}$	0.0	
Q2	Technical-operational qualification of residents from surrounding neighborhoods	To determine if the CONCESSIONAIRE offers registered neighboring residents at least 20% of all available places in the qualification course, per year. The CONCESSIONAIRE shall corroborate the offering of training courses by advertising the training course by electronic means and at the Park's facilities.	$I_{D2} = \frac{\# \text{ Places reserved for residents from neighboring areas/year}}{\# \text{ Places Available/year}} (\%)$	$20\% \leq I_{D2}$	2.0	
				$20\% > I_{D2} \geq 15\%$	1.5	
				$15\% > I_{D2} \geq 10\%$	1.0	
				$10\% > I_{D2}$	0.0	

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Q3	Qualification of training/ certification team	Reviewing evaluations of instructors/ certifiers by students enrolled in training courses offered during the period. This includes evaluations by the CONCESSIONAIRE's employees and neighboring residents attending the training courses. The information and scores to be reviewed shall be produced by way of evaluation forms distributed at the end of the training courses, and completed by participants. The arithmetic mean of all the evaluations produced for the courses offered during the period (scores from 1 to 10, where 1 is the lowest score and 10 is the highest) shall be deemed the final evaluation score.	$I_{D3} = \overline{A_n}$ <i>(n = all evaluations recorded at all training courses offered) (resolution of the scores: 0.5)</i>	$8.5 \leq I_{D3}$	2.0
				$8.5 > I_{D3} \geq 6$	1.5
				$6 > I_{D3} \geq 5$	1.0
				$5 > I_{D3}$	0.0
				Sum Total - A _{IL}	

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- 4.2. The total value of the four-monthly assessment shall range between “0” (zero) and “6” (six) points, and shall be estimated based on the following equation:

$$A_{IL} = \sum_{1}^n NA_n$$

Where:

A_{IL} = Sum Total of Local Integration Indicator assessment scores;

NA_n = Assessment Score for element “n”, relative to the I_{Dn} assigned by the INDEPENDENT RAPPORTEUR.

The subscribed n indicates the numbering of each of the elements comprising the issues to be assessed with the indicator.

- 4.2.1. The annual A_{IL} shall correspond to the arithmetic mean of the 3 (three) four-monthly assessments executed over the 12 (twelve)-month period.

- 4.2.2. The application of the annual A_{IL} in the gradation table, hereunder, produces the value of the Local Integration Indicator (I_{IL}), which shall be used to compute the NF, as described in item 1.5 of this ANNEX.

Valuation	I_{IL}
$A_{IL} > 5,0$	100
$5.0 \geq A_{IL} > 3,5$	90
$3.5 \geq A_{IL} > 2,5$	75
$2.5 \geq A_{IL} > 1,0$	50
$1 \geq A_{IL} > 0$	0

5. SERVICE QUALITY INDICATOR (I_{QS})

- 5.1. The four-monthly assessment of the Service Quality Indicator shall consist of the sum total of assessment scores assigned by the INDEPENDENT RAPPORTEUR to four elements, as established under the following table:

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SERVICE QUALITY INDICATOR (I _{QS})						
#	Element	Assessment	Formula - performance indicator	Gradation		NA
Q1	Compliance with ABNT NBR 15505-1 – Tourism rule, including walking activities and attractions that require monitoring due to existing risks	Determination of compliance with said rule in terms of the proper employment of monitors for walking (trails) and zip-lining activities.	$I_{D1} = \frac{\# \text{ monitors employed}}{\# \text{ monitors needed}} (\%)$	90% ≤ I _{D1}	2.0	
				90% > I _{D1} ≥ 75%	1.5	
				75% > I _{D1} ≥ 50%	1.0	
				50% > I _{D1}	0.0	
Q2	Visitation support and directions	Determination of the existence and state of conservation of information signs and signage to properly direct users within facilities in all areas, and the availability of supporting information materials (printed and online) for visitors, including, at a minimum, maps and a brief indication/description of the main attractions and convenience stops in all areas. The identification of the absence or insufficiency of any requirement shall be deemed a Nonconformity (NC).	I _{D2} = total # NC in all areas	0 = I _{D2}	2.0	
				0 < I _{D2} ≤ 2	1.5	
				2 < I _{D2}	0.0	
Q3	Lines to access public restroom	Assessment of the waiting time in line for all public restrooms, whereas an estimated time of more than 10 minutes, on any operating day of the week (open to the public), including holidays, special events and festive dates, shall qualify as a Nonconformity (NC). The assessment shall be made at all the restrooms, in all areas comprising the CONCESSION AREA, provided that each restroom is subject to at least 3 measurements of the time in line on the same day, but at different periods of the	$I_{D3} = \overline{T_n}$ all times registered at all the restrooms in all the areas	0' 0" ≥ (I _{D3} – 10' 0")	2.0	
				0' 0" < (I _{D3} – 10' 0") ≤ 2' 0"	1.5	

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		day (1 in the morning, 1 at lunchtime and 1 in the afternoon). The time assessment shall be executed by the INDEPENDENT RAPPOREUR, which shall register the time taken for the last person in line to reach the access door to the public restroom (lines inside the restroom, if any, shall not be considered). Based on waiting times recorded, the arithmetic means of all waiting times recorded, at all public restrooms installed in the areas comprising the CONCESSION AREA, shall be calculated. The time assessment per period recorded for combined restrooms (male and female together) shall consider a waiting time in line registered for the female restroom and a waiting time in line registered for the male restroom, for each period (morning, lunchtime and afternoon).		$2' 0'' < (I_{D3} - 10' 0'') \leq 5' 0''$	1.0	
				$5' 0'' < (I_{D3} - 10' 0'')$	0.0	
Q4	Availability of ombudsperson channels for the general public	Determination of the continuing availability of ombudsperson channels to the general public, comprising, at least, a telephone number or email address. A channel shall be deemed available as long as it is not idle for more than 120 straight minutes, per day, or more than 180 cumulative minutes over a course of 15 consecutive operating days (minimum assessment period to be considered).	$I_{D4} = 1$ (when available) $I_{D4} = 0$ (when not available)	$1 = I_{D4}$	2.0	
				$0 = I_{D4}$	0.0	
Sum Total - Aqs						

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- 5.2. The total value of the biannual assessment shall range between “0” (zero) and “8” (eight) points, and shall be estimated based on the following equation:

$$A_{QS} = \sum_{n=1}^n NA_n$$

Where:

A_{QS} = Sum Total of Service Quality Indicator assessment scores;

NA_n = Assessment Score for element “n”, relative to the I_{Dn} assigned by the INDEPENDENT RAPPORTEUR.

The subscribed n indicates each of the elements comprising the issues to be assessed with the indicator.

- 5.2.1. The annual A_{QS} shall correspond to the arithmetic mean of the 3 (three) four-monthly assessments executed over the 12 (twelve)-month period.
- 5.2.2. The application of the annual A_{QS} in the gradation table, hereunder, produces the value of the Service Quality Indicator (I_{QS}), which shall be used to compute the NF, as described in item 1.5 of this ANNEX.

Valuation	I_{QS}
$A_{QS} > 6$	100
$6 \geq A_{QS} > 5$	90
$5 \geq A_{QS} > 4$	75
$4 \geq A_{QS} > 2$	50
$2 \geq A_{QS}$	0

6. VISITOR SATISFACTION INDICATOR (I_{SV})

- 6.1. The main purpose of the Visitor Satisfaction Indicator is to identify the satisfaction level with experiences afforded by visitations to the *Parque Estadual da Cantareira (PEC)* and the *Parque Estadual Alberto Lofgren (PEAL)*, according to the surveying program conceived to assess satisfaction levels of USERS and neighboring communities.
- 6.2. The satisfaction survey is conducted with the use of a questionnaire, to be applied by a team to be hired by the CONCESSIONAIRE, and interviews held on-site with visitors, randomly, or with the voluntary completion by the USER of a form on an electronic device installed within the Park’s facilities, at least every four months.
- 6.3. The sampling of answers to questionnaires (applied physically or in digital form) shall encompass at least 600 (six hundred) USERS per year, with a margin of error of 5% (five percent) and a reliability rate of 95% (ninety-five percent), and identify which (one or more) of the area(s) was used by the USER. The sampling shall be distributed proportionately to each four-month period during which the survey is conducted.

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- 6.4. The questionnaires shall address, at least, the following topics concerning all Areas and Glebes within the CONCESSION AREA: the state of conservation of the infrastructure (constructions, urban furnishings, green areas and facilities in general), the overall quality of cleaning and hygiene, quality of public services (employee courtesy and service time), quality of the signage, and overall satisfaction.
- 6.5. Although the items referenced comprise the minimum characteristics of Areas and Glebes to be evaluated by the users, only the matter of USERS' overall satisfaction shall be considered for purposes of estimating the I_{SV} .
- 6.6. If the CONCESSIONAIRE chooses to conduct the survey by way of on-site interviews, this method shall be employed over a 12 (twelve)-month period, which shall coincide with the annual determination of the NF, using only one form of data collection to estimate the indicator for each Final Score estimation period.
- 6.7. If the survey exceeds the 600 USER sampling size, considering the sum total of valid responses to the survey applied by way of interviews or voluntary completion of the electronic form, the indicator result shall consider evaluations of all respondents during the period for the estimation of the indicator.
- 6.8. The survey shall ask that USERS assess their overall satisfaction with the area or areas used on a scale of integers from 01 (one) to 05 (five), where 01 (one) represents a terrible experience, and 05 (five) represents a great experience.
- 6.9. The Visitor Satisfaction Indicator (I_{SV}) shall result from the estimation of the poor review index (I_{AB}), computed by dividing the sum totals of the level "1" and "2" evaluations by the total number of valid evaluations submitted during the course of the 12-month period preceding the assessment of the Final Score, according to the following equation:

$$I_{AB}(\%) = \frac{(Nav_1 + Nav_2)}{Nav_{total}}$$

Where:

Nav_1 = number of questionnaires in which the question concerning USERS' overall satisfaction with Areas and Glebes was evaluated with a score of "1";

Nav_2 = number of questionnaires in which the question concerning USERS' overall satisfaction with Areas and Glebes was evaluated with a score of "2";

Nav_{total} = total number of questionnaires with valid answers to the question about USERS' overall satisfaction.

- 6.10. Answers are deemed valid when the USER assigns a score between 01 (one) and 05 (five), except for questionnaires in which the user answered, "I don't know" or "I did not use it", or any other evaluation not ranging between the scores of 01 (one) and 05 (five).
- 6.11. The Visitor Satisfaction Indicator (I_{SV}) shall be reached based on the following Poor Review Index (I_{AB}) gradation table:

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Valuation	I_{SV}
$I_{AB}(\%) \geq 40\%$	0
$30\% \leq I_{AB}(\%) < 40\%$	50
$25\% \leq I_{AB}(\%) < 30\%$	75
$10\% \leq I_{AB}(\%) < 25\%$	90
$I_{AB}(\%) < 10\%$	100

7. CONCESSION AREA AND ASSET MAINTENANCE INDICATOR (I_{MA})

- 7.1. The CONCESSION AREA and Asset Maintenance Indicator (I_{MA}) assesses the conservation level of assets within the CONCESSION AREA.
- 7.2. Good conservation level is defined as the absence of Nonconformity (NC), confirmed by inspections executed during the course of technical visits, as established under the Appendix to this ANNEX. The periodicity of technical visits shall be dependent on items to be assessed, as described hereinbelow.
- 7.3. 7 (seven) different items shall be inspected during the technical visits/inspections, each being assigned a certain weight in the final assessment, as established below:

Assessment Item	Weight
a. Electrical Installations	3
b. Firefighting Facilities	3
c. Surveillance and Security Facilities	3
d. Hydraulic Installations	2
e. Construction Work	1
f. Urban Furnishings	1
g. Paving Inside and Outside the Lot (concrete paving)	1

- 7.4. Said technical visits shall be the INDEPENDENT RAPORTEUR's responsibility and shall be executed annually, biannually or quarterly, according to the sub item to be assessed, as shown in the following table, which establishes the number of months between assessments.
- 7.5. Technical visits shall, for each item, identify all Nonconformities, considering the frequency of occurrence and the gravity level of Nonconformities to the state of conservation of installations and systems under examination, as detailed in the Appendix to this ANNEX.

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ITEMS	DESCRIPTION	PERIODICITY (IN MONTHS)	NONCONFORMITY	GRAVITY LEVEL		
				MINIMAL	AVERAGE	CRITICAL
a	Electrical installations	6	Exposed, unprotected wiring.			
		12	Functionally defective grounding.			
		12	Defective SPDA.			
		12	Electrical infrastructure inconsistent with load demand.			
b	Firefighting facilities	6	Shortage of extinguishers or expired extinguishers.			
		12	Alarm system with defective activator.			
		12	Defective sprinklers or other firefighting equipment.			
c	Surveillance and Security Facilities	12	Defective surveillance cameras.			
d	Hydraulic Installations	3	Identifiable leaks and bursts.			
		3	Clogging.			
		6	Water reservoirs lacking proper cleaning and hygiene.			
e	Construction Works	12	Cracks/fissures on coatings and structural elements.			
		12	Identification of moisture on walls, panelings and structural elements.			
f	Urban Furnishings	12	Urban furnishings absent or in a poor state of conservation.			
g	Internal Road Paving and Concrete Paving	12	Horizontal signage in a poor state of conservation.			
		12	Vertical signage unavailable or in a			

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ITEMS	DESCRIPTION	PERIODICITY (IN MONTHS)	NONCONFORMITY	GRAVITY LEVEL		
				MINIMAL	AVERAGE	CRITICAL
			poor state of conservation.			
		12	Identification of cracks and/or holes on the road paving.			
		12	Identification of cracks and/or holes on sidewalks.			

7.6. The assessment method and criteria applying to nonconformities listed in each sub item are detailed in the Appendix to this ANNEX.

7.7. The assessment score for each item shall observe the following scale from 0 to 1:

ITEM	SCORE
If the sub item is compliant (absence of Nonconformity)	the score shall be "1.0";
If the sub item shows up to 1 (one) minimal Nonconformity	the score shall be "0.7";
If the sub item shows more than 1 (one) minimal Nonconformity	the score shall be "0.5";
If the sub item shows up to 1 (one) medium-level Nonconformity	the score shall be "0.4";
If the sub item shows more than 1 (one) medium-level Nonconformity	the score shall be "0.2";
If the sub item shows a critical Nonconformity	all the scores for all sub items of this item shall be "0";

- The annual score for each item shall be the arithmetic mean of evaluations executed during the course of the year, when evaluated more than once in the year;
- The mean value of the items shall correspond to the arithmetic mean of scores assigned to their sub items.

7.8. As a result of the technical visit, the INDEPENDENT RAPPOREUR shall produce a report listing Nonconformities verified and disclosing scores assigned to each item and sub item, computing the Conformity Index (I_C) obtained with the evaluation during the technical visit, employing the following equation:

$$I_C (\%) = \frac{\sum_{i=0}^N A_i W_i}{\sum_{i=0}^N W_i}$$

Where:

A_i = Score reached with the evaluation of each item (between 0 and 1);

W_i = Weight of the evaluation score assigned to each item (between 1 and 3);

i = represents each assessment item (between 1 and 7);

7.9. The evaluation of item e. Construction Works shall consider the INTERVENTION PLAN.

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7.10. The following gradation table shall apply to the determination of the I_{MA} :

Valuation	I_{MA}
$I_C \geq 90\%$	100
$85\% \leq I_C < 90\%$	90
$80\% \leq I_C < 85\%$	75
$70\% \leq I_C < 80\%$	50
$I_C < 70\%$	0

- By applying the result of the estimation of the I_C according to the gradation table, above, the value of the CONCESSION AREA and Asset Maintenance Indicator (I_{MA}) is reached.



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APPENDIX – ASSESSMENT OF NONCONFORMITY

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This Appendix describes how to identify and assess Nonconformities (NC) comprising the CONCESSION AREA and Asset Maintenance Indicator (I_{MA}), as established hereunder.

The following sections establish the definitions and criteria used to identify and assess Nonconformities.

1. GENERAL PROVISIONS ON THE ASSESSMENT OF A NONCONFORMITY

The following definitions of the terms used in this ANNEX are consistent with the definitions in ABNT NBR 5462 – Reliability and Maintainability, and the ABRAMAN (Associação Brasileira de Manutenção), according to the book “A falha não é uma opção” (“Failure is not an option”), by Eng. José Wagner Braidotti Jr, as well as the regulation issued by IBAPE Nacional (Instituto Brasileiro de Avaliações e Perícias de Engenharia), concerning the criticality level of defects and anomalies.

1.1. Definitions

In the assessment of Nonconformities, the following definitions are to apply:

ITEM	Any part, component, device, subsystem, functional unit, equipment or system liable to be examined individually.
PARTIAL DEFECT OR FAILURE	Any deviation of a single characteristic of an ITEM from its standard requirements. Interpretation: any change in the conditions of the ITEM that does not stop it from working, albeit partially. Example: any heating that does not interfere with the ITEM's capacity to work, or a vibration that does not affect the item's capacity to function.
COMPLETE DEFECT OR FAILURE	Elimination of an ITEM's capacity to function as required. Interpretation: any event that completely prevents the ITEM from executing its intended function. Example: breakage of the pump's axis, which completely stops the pumping function (the pump's functionality).
CAUSE OF FAILURE	Design-related or manufacturing defect, or circumstances surrounding the item's use, which ultimately cause the FAILURE.

1.2. Classification of the criticality level

The classification as to the criticality level of a DEFECT or FAILURE shall take into account certain technical aspects, such as the likelihood of causing accidents, the cost of repair, deterioration level, the loss of real estate value and the loss of optimal performance.

For purposes of this ANNEX, the Norma de Inspeção Predial Nacional (National Building Inspection Regulation) shall apply, which was approved in October 2012, by Instituto Brasileiro de Avaliações e Perícias de Engenharia-Nacional (IBAPE Nacional), which ranks DEFECTS and FAILURES according to the following risk degrees:

- **CRITICAL:** risk of damaging human health and safety and the environment; excessive loss of performance and functionality, possibly entailing stoppages; excessive increment of maintenance and recovery costs; considerable decrease of useful life.

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- **MEDIUM:** risk of partial loss of performance and functionality of the construction, without detriment to the direct operation of systems, and premature deterioration.
- **MINIMAL:** risk of minor aesthetic losses or losses to programmable and scheduled activities, which does not entail nor increase the likelihood of critical or regular risks, and poses little to no risk of loss of real estate value.

1.3. Rounding-off rule applying to the estimation of nonconformities

In the event that the result of the estimation of the ratio between the inspected quantity and the total sampled quantity produces a decimal number, the value reached shall always be rounded up.

Example:

$R = \text{ratio between quantity of failed items and quantity of items inspected} \Rightarrow R = 5/4 = 1.25 \Rightarrow \text{rounding up} \Rightarrow R = 2.$

1.4. Methodology employed to determine sampling and tolerance percentiles

The methodology employed to determine the sampling and tolerance percentiles includes a number of aspects that must be considered in this determination. The following are the main elements:

- I. Requirement level according to the following priority:
 1. safety of users, employees, facilities and equipment
 2. functionality of facilities and equipment
 3. user comfort
- II. Number of equipment and parts of the same category installed in constructions to be inspected;
- III. Difficulty to access items to be inspected and resources available to execute the inspection;
- IV. Prior experience with similar equipment and facilities;
- V. History of failure of the equipment and facilities involved, and their level of risk;
- VI. Sampling parameters normally used in the inspection market (there is no general rule to be applied);
- VII. Inspection professionals recommend that data collection is not done by way of sampling or partial inspections.

So, the methodology to define the sampling and tolerance percentiles has considered the above aspects, executing a specific analysis for each of the failures defined in the following item.

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2. Description of Malfunctions and Evaluation of Nonconformities

2.1. Electrical Installations

I. Exposed, unprotected wiring

Evaluation criterion: there can be no exposed wiring in constructions' electrical installations. All wiring must be embedded into conduits internal or external to structures and/or inside enclosures with the insulating protection intact.

Sampling: not applicable. The entire installation must be inspected.

Tolerance: 0%.

II. Functionally defective grounding (in part or in full)

Evaluation criterion: the state of the grounding system must meet, in its entirety, all recommendations posed in standards NR-10 and ABNT NBR-5419-3 [1 - 2], which shall be examined during an inspection that follows, at least, the following procedures:

- a. assess the integrity and physical conditions (checking for corroded connections, loose, damaged or absent grounding cables, etc.).
- b. measure the ohmic grounding resistance and its continuity.
- c. measure the resistivity of the soil in urbanized areas (asphalt, concrete, etc.), confirming if the measured resistance is compatible with the arrangement and dimensions of the grounding system.
- d. check the interconnection of the construction's grounding subsystems, by means of low-impedance equipotential bonding.

Sampling: not applicable. All grounding systems and subsystems of constructions must be inspected.

Tolerance: 0%. All installed systems must fully comply with the above-mentioned standards.

III. Functionally defective SPDA (in part or in full)

Evaluation criterion: the state of the SPDA (Atmospheric Discharge Protection System) must fully meet the conditions described in the technical standard ABNT NBR 5419, according to the following guidelines:

- a. the SPDA must be consistent with the project;
- b. All SPDA components shall be in a good state, the connections and fixings firm and corrosion-free;
- c. the grounding resistance value must be compatible with the arrangement and dimensions of the grounding subsystem, and with the resistivity of the soil. Systems using the foundations as a grounding electrode are exceptions to this requirement;
- d. all constructions added to the structure after the original installation must be integrated with the volume to be protected, through a connection to the SPDA or its expansion;

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- e. the resistance may also be estimated based on the stratification of the soil, with the use of a suitable program. In this case, the measurement of the grounding resistance is dispensable.

Sampling: not applicable. All systems installed must be inspected.

Tolerance: 0%. All installed systems must meet all the requirements.

IV. Electrical infrastructure inconsistent with load demand

Evaluation criterion: the load demand of constructions' main and distribution panels shall be measured to determine the expected balance of the electrical project during the installation stages. If the distribution is not consistent with the standards and the project, with the electrical system on line, a Nonconformity shall be deemed to exist. The expected electrical load and the entire protection circuit shall adhere to the requirements of standard ABNT NBR 5410, item 4.2.1.2 A. All documents concerning the electrical installations must be current (*as built*).

Sampling: not applicable. All installed electrical panels must be inspected.

Tolerance: 0%. All electrical panels must be properly balanced with the installed load and meet all required technical conditions.

2.2. Firefighting Facilities

I. Shortage of Extinguishers or expired Extinguishers

Evaluation criterion: the lack of a fire extinguisher in a place predetermined by the fire prevention and firefighting plan, the presence of expired extinguishers, and the failure to adhere to any other parameter defined in standard NBR 1296 - Fire extinguisher inspection, maintenance and recharging, and in the FIRE EXTINGUISHER INSPECTION PROCEDURE, Inmetro ordinances 206/2011, 05/2011, 486/2010 and 500/2011 Codes - 3295 / 3310 / 3311, in addition to the standards referenced in this document (NBR 15808 and 10721), shall be deemed Nonconformities, subject to no tolerance threshold.

Sampling: not applicable. All fire extinguishers anticipated in the fire prevention and firefighting plan must be inspected.

Tolerance: 0%. Any irregularity identified shall be deemed a Nonconformity. One Nonconformity shall be counted for each irregular fire extinguisher identified during the inspection.

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II. Alarm systems with FULLY OR PARTLY DEFECTIVE activators

Evaluation criterion: sound alarm systems and emergency lights shall be activated for simulation purposes. Any alarm system or emergency lights showing a PARTIAL or FULL DEFECT shall be deemed a Nonconformity. The number of Nonconformities shall correspond to the number of alarm systems and emergency lighting that fail during the inspection. Standards taken as reference for fire alarm systems: NR 23 - Fire Protection, and ABNT NBR 17240.

Sampling: not applicable. All sound alarm systems and emergency lights must be activated to test their functionality.

Tolerance: 0%. Any alarm system or emergency lighting that shows a PARTIAL or FULL DEFECT shall be deemed a Nonconformity.

III. Sprinklers and other firefighting equipment showing FULL OR PARTIAL DEFECTS

Criterion: sprinklers and other firefighting equipment are to be tested, focusing on those installed in the most densely populated areas, according to the fire prevention and firefighting plan. A Nonconformity shall be deemed to exist when the number of sprinklers and other firefighting equipment showing PARTIAL or FULL DEFECTS exceed 5% (five percent) of the number tested. Moreover, after the quantitative (absolute) tolerance threshold, each sprinkler or other firefighting equipment that is defective shall be deemed a Nonconformity.

Example: if the number of defective sprinklers identified is 20 and the tolerance threshold for this component is 12 (twelve), 8 (eight) Nonconformities shall be counted.

Sampling: at least 20% (twenty percent) of the total number of sprinklers and other firefighting equipment installed in the constructions shall be inspected.

Tolerance: up to 5% (five percent) of the total number of sprinklers and other firefighting equipment inspected.

2.3. Surveillance and Security Facilities/Access Control

I. PARTLY or FULLY DEFECTIVE surveillance cameras

Evaluation criterion: all CCTV active surveillance cameras shall be tested, according to the property security and access control plan. A Nonconformity shall be deemed to exist if the number of cameras that are PARTLY or FULLY DEFECTIVE exceeds 2% of the number of cameras installed and operational. Moreover, after the quantitative (absolute) tolerance threshold, every 1% of defective surveillance cameras shall be deemed a Nonconformity.

Example: if the number of defective cameras identified is 4 and the tolerance threshold for this component is 2, then 2 Nonconformities shall be counted.

Sampling: not applicable. All surveillance cameras must be tested during the inspection.

Tolerance: up to 5% of the total number of surveillance cameras inspected.

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2.4. Hydraulic Installations

I. Leaks or bursts

Evaluation criterion: there can be no leaks identified in constructions' cold water, sewage or rainwater collection systems nor water hose ruptures.

Sampling: not applicable. The entire cold water, sewage and rainwater collection system, and all water hoses, must be inspected.

Tolerance: 0%. Any breakage or leak detected during the inspection shall be deemed a Nonconformity, and the number of Nonconformities shall be quantified according to the number of leaks or bursts verified.

II. Clogging

Evaluation criterion: there can be no clogging in constructions' cold water, sewage or rainwater collection systems.

Sampling: not applicable. The entire cold water, sewage or rainwater collection system must be inspected.

Tolerance: 0%. Any clogging detected during the inspection shall be deemed a Nonconformity, and the number of Nonconformities shall be quantified according to the number of clogging incidents verified.

III. Water reservoirs lacking the proper cleaning and hygiene

Evaluation criterion: the CONCESSIONAIRE shall provide the inspection team with cleanliness and hygiene certificates for the enterprise's drinking water reservoirs, which shall be fully compliant with the requirements of Consolidation Ordinance No. 5 OF 09/28/2017, ANNEX XX - CONTROL AND SURVEILLANCE OF WATER QUALITY FOR HUMAN CONSUMPTION AND THE DRINKABILITY STANDARD (Source: PRT MS/GM 2914/2011).

Sampling: Not applicable.

Tolerance: 0%.

2.5. Construction Works

I. Cracks and/or fissures on coatings and structural elements

Evaluation criterion: there may be no cracks and/or fissures in coatings and structural elements of the enterprise's constructions. A visual inspection must be executed.

Sampling: Not applicable.

Tolerance: 0%. Any crack or fissure verified in coatings and structural elements of constructions during the visual inspection shall be deemed a Nonconformity, and the number of Nonconformities shall correspond to the number of cracks and fissures verified.

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II. Identification of moisture on walls, panelings and structural elements

Evaluation criterion: there can be no moisture present due to a failure of hydraulic systems or to the malfunction and/or lack of maintenance of waterproofing systems. Any moisture resulting from any one of the above-mentioned failures and verified during the visual inspection shall be deemed a Nonconformity.

Sampling: Not applicable.

Tolerance: 0%. Any moisture resulting from any one of the above failures verified during the visual inspection shall be deemed a Nonconformity, and the number of Nonconformities shall correspond to the number of cracks and fissures verified.

2.6. Urban Furnishings

I. Urban furnishings that are absent or in a poor state of conservation

Evaluation criterion: any urban furnishing (benches, drinking fountains, garbage bins, bike racks, direction signs, etc.) that is unavailable because it is absent (furnishings removed from their original installation point), or lacks proper sanitation, which prevents its use, or is in such a poor state that it poses a risk or causes discomfort to USERS, shall be deemed a Nonconformity. Specifically regarding public drinking fountains, they must offer drinking water according to the rules in Consolidation Ordinance No. 5, of 09/28/2017, ANNEX XX - CONTROL AND SURVEILLANCE OF WATER QUALITY FOR HUMAN CONSUMPTION AND THE DRINKABILITY STANDARD. The direction signs, on the other hand, must be legible, showing no degrading elements such as lack of paint, rust or damage.

Sampling: 100% for the drinking fountains and at least 50% for the other items of urban furnishings installed in the Concession area shall be inspected.

Tolerance: up to 5% of all furnishings shall be inspected.

2.7. Internal Paving and Sidewalks

I. Horizontal signage in a poor state of conservation

Evaluation criterion: The horizontal signage along the pavement within the development area may not show damage to an extent that its USER information function is impaired or even eliminated. If defects of such an extent are verified during the inspection, they shall be deemed Nonconformities.

Sampling: Not applicable. All horizontal visual signage in the internal area of the development shall be inspected.

Tolerance: 0%. Any defect that impairs or prevents the informative function shall be deemed a Nonconformity.

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II. Vertical signage that is absent or in a poor state of conservation

Evaluation criterion: The vertical signage within the enterprise's internal area (signs affixed to poles, walls, columns, etc.) may not show damage to an extent that its user information function is impaired or even eliminated (such as, signs that are crooked, dented, installed in the wrong position, with faded paint, inclined or crooked support pole, or even the absence of the sign in its predetermined installation site). If defects to such an extent are verified during the inspection, they shall be deemed Nonconformities.

Sampling: Not applicable. All vertical visual signage within the development area shall be inspected.

Tolerance: 0%. Any defect that impairs or prevents the informative function shall be deemed a Nonconformity.

III. Identification of cracks and/or holes on the road paving

Evaluation criterion: the enterprise's internal pavement (asphalt and/or concrete) may not have holes or cracks that impair its performance (such as, pedestrian and/or vehicle circulation difficulties) and/or facilitate water infiltration and accelerate its potential deterioration over time. If these irregularities are verified during the inspection, they shall be deemed a Nonconformity.

Sampling: Not applicable. The entire internal pavement within the development area shall be inspected.

Tolerance: up to 5 (five) cracks and/or holes. The sum total of irregularities may not exceed the tolerance threshold. If so, the excess number shall be deemed Nonconformities, in a number equivalent to the excess number.

IV. Identification of cracks and/or holes on sidewalks

Evaluation criterion: sidewalks within the development area may not show cracks and/or holes that pose a risk of accidents to pedestrian users upon the INDEPENDENT RAPPORTEUR's inspection.

Sampling: Not applicable. All sidewalks within the enterprise area shall be inspected.

Tolerance: up to 3 (three) cracks and/or holes. The sum total of irregularities may not exceed the tolerance threshold. If so, the excess number shall be deemed Nonconformities, in a number equivalent to the excess number.