



STATE SECRETARIAT FOR INFRASTRUCTURE AND ENVIRONMENT

ANNEX XXI – PERFORMANCE INDICATORS

STATE SECRETARIAT FOR INFRASTRUCTURE AND ENVIRONMENT

This ANNEX describes the PERFORMANCE INDICATORS for the CONTRACT, to be used to measure the CONCESSIONAIRE's performance during the course of its contractual obligations and, consequently, to determine the VARIABLE GRANT payable.

Below is a description of the form and frequency of assessment of these PERFORMANCE INDICATORS.

The CONCESSIONAIRE's performance shall be assessed every 12 (twelve) months, the first assessment closing in the 24th month after the EXECUTION DATE, based on the Final Score (NF), reached according to the following expression:

$$NF = \frac{1}{2} \sqrt{INDICADOR \text{ DE BEM ESTAR ANIMAL} \times INDICADOR \text{ DE INTEGRIDADE DA FLORA}} + \frac{1}{2} \times INDICADOR \text{ DE USUÁRIOS}$$



I_{saúde}



I_{injúria}



I_{Satisfação}

<i>Escala de Notas</i>	<u>100</u>	<u>100</u>	<u>100</u>
	<u>90</u>	<u>90</u>	<u>90</u>
	<u>70</u>	<u>70</u>	<u>70</u>
	<u>50</u>	<u>50</u>	<u>50</u>
	<u>25</u>	<u>25</u>	<u>25</u>
	<u>00</u>	<u>00</u>	<u>00</u>

According to the NF computed, we reach a value, expressed in percentage points, to be added to the minimum VARIABLE GRANT percentage value, as stipulated in Section Thirteen of the CONTRACT, which shall be due by the CONCESSIONAIRE in the following annual cycle, as established in ANNEX XXIV.

The following table describes the ratio between the NF and the accrual, expressed in percentage points, due by the CONCESSIONAIRE, in addition to the minimum percentage of its REVENUES payable by way of the VARIABLE GRANT.

Final Score (NF)	Percentage points to be added to the minimum VARIABLE GRANT baseline
$90 \leq NF \leq 100$	0.00p.p
$75 \leq NF < 90$	1.50p.p
$50 \leq NF < 75$	2.50p.p
$25 \leq NF < 50$	5.00p.p
$00 < NF < 25$	7.50p.p
00	10.00p.p

STATE SECRETARIAT FOR INFRASTRUCTURE AND ENVIRONMENT

1.1 Indicator of Animal Wellbeing

The Indicator of Animal Wellbeing results from the following equation:

$$INDICATOR\ OF\ ANIMAL\ WELLBEING = I_{health}$$

where:

- I_{health} : corresponds to the Clinical Health Rate

Regardless of the assessment of the CONCESSIONAIRE's performance, determined based on the above indicators, the death of any individual Breeding Stock member that is proven to have been caused by mistreatment and/or clinical negligence, shall entail the assignment of the minimum score to the Indicator of Animal Wellbeing in the year when the death is registered.

This NF reduction shall be cumulative over the following years, according to the number of incidents, regardless of concurrency, except for incidents happening consecutively, affecting the same species. In this sense, the CONCESSIONAIRE shall be assigned a minimum score for the Indicator of Animal Wellbeing for as many years as the numbers of deaths of any individual Breeding Stock member proven to have been caused by mistreatment and/or clinical negligence.

1.1.1 Clinical Health

The Clinical Health Rate evaluates the quality of the animals' health based on the frequency of visits to the clinic due to illnesses or injuries.

Illness is defined as a specific abnormal condition caused by viral, bacterial or parasitic infection, which adversely affects the organism and the structure or functionality of part or the whole organism. Injury is defined as any abnormal modification or damage of the tissue of a live organism.

Identification of clinical visits resulting from illnesses or injuries shall be done by a qualified professional veterinarian, based on documented clinical reports.

For purposes of this Rate, the following minimum information shall be considered in the assessment:

- Injuries resulting from fights between animals, accidents caused by improper management or improper enclosures;
- Health conditions resulting from improper temperature control in enclosures, according to the species;
- Health conditions resulting from food or environmental contamination, malnutrition or obesity;
- High frequency of illnesses, including those caused by synanthropic species;
- Predatory hunting by household or exotic animals.

Monitoring and assessment of animals' health shall be executed according to their specific classes, for vertebrates being: mammals, birds, reptiles and amphibians, and for invertebrates, for purposes of analysis and assessment of the indicator, "class" is defined as the set of all representative classes (taxonomic rank) comprising the breeding stock. The specific Clinical Health Rates shall be measured for each class, and later consolidated within the overall Clinical Health Rate computed according to the following equation:

STATE SECRETARIAT FOR INFRASTRUCTURE AND ENVIRONMENT

$$I_{health} = \frac{S_{mammals} + S_{birds} + S_{reptiles} + S_{amphibians} + S_{invertebrates}}{5}$$

where:

- $S_{mammals}$: corresponds to the Health Indicator specifically applying to mammals;
- S_{birds} : corresponds to the Health Indicator specifically applying to birds;
- $S_{reptiles}$: corresponds to the Health Indicator specifically applying to reptiles;
- $S_{amphibians}$: corresponds to the Health Indicator specifically applying to amphibians;
- $S_{invertebrates}$: corresponds to the Health Indicator specifically applying to invertebrates.

1.1.1.1 Clinical Health Indicator specifically applying to each class

To compute the Health Indicator applying to class j , so that j refers to the classes of mammals, birds, reptiles and amphibians or to the set of representative classes of invertebrates, the following baselines shall be calculated:

- PRd_j : referential mean value of class j for the ratio between the number of medical visits for illnesses or injuries and the number of individuals;
- PD_j : mean value of class j for the ratio between the number of medical visits for illnesses or injuries and the number of individuals; and
- $F_{saúde,j}$: Health factor of class j .

To determine the rate, the ratio between the number of medical visits resulting from illnesses and injuries and the number of animals of class j managed within the Inventory shall be computed each month. This value is defined as the Monthly Percentile of Animal Injuries in class j ($P_{i,fauna_{j,t}}$), to be computed according to the following expression:

$$P_{i,fauna_{j,t}} = \frac{\text{Number of medical visits in class } j \text{ resulting from illnesses and injuries during the month}}{\text{Number of Individuals of class } j \text{ within the Inventory}}$$

The mean Monthly Percentile of Animal Injuries in class j ($P_{i,fauna_{j,t}}$) shall be computed for the last 36 months preceding the issuance of the Management Permit (MP) in the name of the CONCESSIONAIRE, known as PRd_j , based on the historic data made available by the Zoological Park Foundation of São Paulo.

This percentile shall be computed based on the following equation:

$$PRd_j = \frac{\sum_{i=1}^{36} P_{i,fauna_{j,t-i}}}{36}$$

STATE SECRETARIAT FOR INFRASTRUCTURE AND ENVIRONMENT

The PRd_j determined by the CONCESSIONAIRE shall be validated by way of an audit executed by the INDEPENDENT RAPORTEUR. The CONCESSIONAIRE shall deliver information and data to support the resulting PRd_j to the INDEPENDENT RAPORTEUR, who shall produce its evaluation within 30 (thirty) days. If the PRd_j reached is less than 0,5% , the value of 0.5% shall be assumed for the baseline.

For the PRd_j audit, a random sample of at least 20% (twenty percent) of the base number of medical examinations performed by the FPZSP within class j shall be considered. If the evaluation produces an absolute difference of more than 5% (five percent) from the result reached by the CONCESSIONAIRE, the latter shall redo its calculation of the PRd_j , which will thereafter be audited again by the INDEPENDENT RAPORTEUR.

If the PRd_j cannot be calculated or validated by the INDEPENDENT RAPORTEUR, for a reason attributable to the CONCESSIONAIRE, the PRd_j will be considered, provisionally, as of value equal to 0,5%, until the completion of the calculation and auditing by the INDEPENDENT RAPORTEUR.

At each ORDINARY REVISION, , the PRd_j value shall be recalculated, based on information concerning the thirty six-month period.

The mean Monthly Percentile of Animal Injuries within class j ($P_{i,fauna_t}$), known as PD_j shall be computed annually.

This percentile shall be computed based on the following equation:

$$PD_j = \frac{\sum_{i=1}^{12} P_{i,fauna_t-i}}{12}$$

If the resulting PD_j value is less than 0.5%, the value of 0.5% shall be assumed for the baseline.

The PD_j value determined by the CONCESSIONAIRE shall be validated by way of an audit executed by the INDEPENDENT RAPORTEUR. The CONCESSIONAIRE shall deliver information and data to support the resulting PD_j to the INDEPENDENT RAPORTEUR, who shall produce its evaluation within 30 (thirty) days.

For the PD_j audit, a random sample of at least 10% (ten percent) of the base number of medical examinations performed by the CONCESSIONAIRE within class j shall be considered. f the evaluation produces an absolute difference of more than 5% (five percent) from the result reached by the CONCESSIONAIRE, the latter shall redo its calculation of the PD_j , which will thereafter be audited again by the INDEPENDENT RAPORTEUR.

If the PD_j cannot be calculated or validated by the INDEPENDENT RAPORTEUR, for a reason attributable to the CONCESSIONAIRE, the minimum score shall be assigned to the Health Rate of class j .

The Clinical Health Factor of class j ($F_{saúde}$) shall be computed based on the following equation:

$$F_{saúde} = \frac{PD_j - PRd_j}{\sqrt{\frac{PD_j \times (1 - PD_j)}{12} + \frac{PRd_j \times (1 - PRd_j)}{36}}}$$

STATE SECRETARIAT FOR INFRASTRUCTURE AND ENVIRONMENT

Based on the value determined for the Clinical Health Factor of class j , the following values are reached for the Clinical Health Rate of class j (S_j):

00	1 f:	$F_{health} \leq 0.00$
0	5 f:	$0.00 < F_{health} \leq 0.67$
5	7 f:	$0.67 < F_{health} \leq 1.28$
	5 f:	$1.28 < F_{health} \leq 1.64$
5	2 f:	$1.64 < F_{health} \leq 3.00$
	6 f:	$F_{health} > 3.00$

1.2 Flora Integrity Indicator

The Flora Integrity Indicator results from the following equation:

$$FLORA\ INTEGRITY\ INDICATOR = I_{injury}$$

where:

- I_{injury} : corresponds to the Flora Injury Rate.

1.2.1 Injury

The Injury Rate assesses the quality of the care provided, by examining photographic records of the individuals' state of integrity, and rating them as "excellent", "good", "fair", "poor" and "very bad", depending on the presence of visible injuries on the branches and leaves, according to the method described in ANNEX IX – METHOD FOR ASSESSING FLORA INTEGRITY.

The rate will be computed based on the percentage of integrity ratings as "poor" or "very bad" during the months between the EXECUTION DATE of the CONTRACT and the authorization to operate BIOLOGICAL ASSETS of Flora, known as PRi and computed according to the following equation:

$$PRi = \frac{\text{Sum total of individuals whose integrity is classified as "poor" or "very bad"}}{N_{live\ collection}}$$

where $N_{live\ collection}$ is the number of individuals selected among the individuals from the live collection catalogued in the inventory of BIOLOGICAL ASSETS of flora by the CONCESSIONAIRE.

If the inventory of BIOLOGICAL ASSETS of Flora to be catalogued by the CONCESSIONAIRE has not been completed upon the calculation of the baselines referenced above, a random sample shall be considered of at least 25% of the inventory catalogued by the CONCESSIONAIRE by the time when the above baselines are calculated.

STATE SECRETARIAT FOR INFRASTRUCTURE AND ENVIRONMENT

The CONCESSIONAIRE shall submit to the GRANTING AUTHORITY the methodology to be used to determine the sample, to be approved by the GRANTING AUTHORITY.

The **PRi** value determined by the CONCESSIONAIRE shall be validated by way of an audit executed by the INDEPENDENT RAPPOREUR. The CONCESSIONAIRE shall deliver data and information supporting the **PRi** result to the INDEPENDENT RAPPOREUR, who shall produce its evaluation within 30 (thirty) days.

For the auditing of the **PRi** value, a random sample of at least 10% (ten percent) of the inventory of BIOLOGICAL ASSETS of Flora shall be considered. If the evaluation produces an absolute difference of more than 5% (five percent) from the result reached by the CONCESSIONAIRE, the latter shall redo its calculation of the **PRi** value, which will thereafter be audited again by the INDEPENDENT RAPPOREUR.

Any inconsistencies found in the **PRi**, the **PRi** will be considered, provisionally, as of value equal to 0,5%, until such time when the inconsistencies have been resolved and audited by the INDEPENDENT RAPPOREUR.

The percentage of integrity ratings as “poor” or “very bad”, known as *PI*, shall be calculated annually, based on the updated inventory of BIOLOGICAL ASSETS of Flora.

Calculations of the *PI* baseline shall be done based on a random sample of at least 25% of the BIOLOGICAL ASSETS of Flora handled by the CONCESSIONAIRE.

The CONCESSIONAIRE shall submit to the GRANTING AUTHORITY the methodology to be used to determine the sample, to be approved by the GRANTING AUTHORITY.

This percentile shall be computed based on the following equation:

$$PI = \frac{\text{Sum total of individuals whose integrity is classified as "poor" or "very bad"}}{N_{\text{updated live collection}}}$$

where $N_{\text{updated live collection}}$ is the number of individuals selected among the individuals making up the live collection catalogued in the updated inventory of BIOLOGICAL ASSETS of Flora by the CONCESSIONAIRE.

The **PI** value determined by the CONCESSIONAIRE shall be validated by way of an audit executed by the INDEPENDENT RAPPOREUR. The CONCESSIONAIRE shall deliver data and information supporting the **PI** result to the INDEPENDENT RAPPOREUR, who shall produce its evaluation within 30 (thirty) days.

For the auditing of the **PI** value, a random sample of at least 10% (ten percent) of the inventory of BIOLOGICAL ASSETS of Flora shall be considered. If the evaluation produces an absolute difference of more than 5% (five percent) from the result reached by the CONCESSIONAIRE, the latter shall redo its calculation of the **PI** value, which will thereafter be audited again by the INDEPENDENT RAPPOREUR audit of the **PI**.

The absence of an assessment of the indicator due to inconsistencies in the **PI** shall entail assignment of the minimum score to the Injury Rate. The Injury Factor (F_{injury}) is computed based on the following equation:

$$F_{\text{injury}} = \frac{PI - PRi}{\sqrt{\frac{PI \times (1 - PI)}{N_{\text{updated live collection}}} + \frac{PRi \times (1 - PRi)}{N_{\text{live collection}}}}}$$

STATE SECRETARIAT FOR INFRASTRUCTURE AND ENVIRONMENT

According to the value reached for the Injury Factor, the following values shall result for the Injury Rate (I_{Injury}):

00	f:	$F_{Injury} \leq 0.00$
0	f:	$0.00 < F_{Injury} \leq 0.67$
5	f:	$0.67 < F_{Injury} \leq 1.28$
0	f:	$1.28 < F_{Injury} \leq 1.64$
5	f:	$1.64 < F_{Injury} \leq 3.00$
	f:	$F_{Injury} > 3.00$

1.3 User Indicator

The User Indicator is computed based on the following equation:

$$USER\ INDICATOR = I_{satisfaction}$$

where:

- $I_{satisfaction}$: corresponds to the Satisfaction Rate.

1.3.1 Satisfaction

The Satisfaction Rate shall assess the quality of the service provided to the USERS of the ZOO, the BOTANIC GARDEN and the FARM, the latter only in case of offering, through the assessment of satisfaction surveys applied to the USERS of the equipment.

Satisfaction surveys shall be applied in the form of questionnaires prepared by a specialized company, at least once a month, as from the issuance of the TERM OF DELIVERY OF THE PUBLIC ASSET.

The specialized company shall possess at least 3 (three) certificates attesting to its technical qualification to provide the services to be contracted, issued by public or private institutions. Certificates shall contain a description of the service executed and confirm that the services were performed as contracted, in terms of timeframes and quality, and include the following information:

- I. Name, registration number and full address of the issuing legal entity;
- II. Full name, job title, contact number of the person responsible for the certificate;
- III. Contract or contracting document to which the certificate refers;
- IV. Subject and term of duration of the contract;
- V. Detailed description of the services executed: type, quantities, nature, specifications, etc.; and

STATE SECRETARIAT FOR INFRASTRUCTURE AND ENVIRONMENT

VI. Methodologies, technologies, and other resources employed during the execution of services.

Satisfaction surveys shall be applied by a specialized company, to include the surveying of at least 200 (two hundred) USERS per month, with a margin of error of 5%, a reliance rate of 95%, and they shall register the geographic coordinates (latitude and longitude) of the location where the survey was applied.

The survey shall ask USERS to evaluate, on a scale from 01 (one) to 05 (five), where 01 (one) represents a poor experience and 05 (five) a great experience, the following topics:

- USER assistance;
- Preferred assistance: special needs, pregnant and elderly USERS;
- Security: USERS' perceived security;
- Facilities: assessment of hygiene, food services and support received while at the venue;
- Vertical and horizontal signaling: USER directions to different venues;
- Accesses and routes: ease of access to the BIOLOGICAL ASSETS' visitation sites;
- Furniture: utilitarian, informative, cabin and kiosk, artistic features or landscaping, and type of visit.

The User Indicator ($I_{satisfaction}$) shall be assessed based on the satisfaction surveys applied during the past 12 months, and scored as follows:

- 100 when 85% or more of the questions are answered with a score of 4 or 5;
- 75 when 75% to 84.99% of the questions are answered with a score of 4 or 5;
- 50 when 65% to 74.99% of the questions are answered with a score of 4 or 5;
- 25 when 40% to 64.99% of the questions are answered with a score of 4 or 5;
- 00 when less than 40% of the questions are answered with a score of 4 or 5.

Validation of the minimum requirements for the company that was hired and the surveying methodology to determine the satisfaction shall be subject to the approval, by audit, of the INDEPENDENT RAPPORTEUR, which shall submit its evaluation within 30 (thirty) days after the CONCESSIONAIRE delivers all documents.

For auditing of the satisfaction survey's results, a random sample of at least 10% (ten percent) of surveys shall be considered. If the evaluation produces an absolute difference of more than 5% (five percent) from the result reached by the CONCESSIONAIRE, the latter shall redo its assessment of the satisfaction survey, which shall thereafter be audited again by the INDEPENDENT RAPPORTEUR.

Absence of an assessment of the indicator due to inconsistencies in the satisfaction survey shall entail assignment of the minimum score to the User Rate.