

## **APPENDIX D**

### **OPERATIONAL SERVICE LEVELS**

#### **SPONSORED CONCESSION OF PUBLIC SERVICES FOR CONSTRUCTION, OPERATION, MAINTENANCE AND INVESTMENTS NECESSARY FOR THE EXPLORATION OF THE SANTOS- GUARUJÁ IMMERSSED TUNNEL**

## 1. INTRODUCTION

- 1.1. In this APPENDIX the ideal service levels to be complied with by the CONCESSIONAIRE are outlined. The service levels indicated here have their tolerance space regulated in EXHIBITS 3 and 11.
- 1.1.1. For the service levels without correspondence in APPENDIX A, the requirements and the operationality gradations were also described, when applicable. If the gradations are not acceptable from the point of view of service level, they will be expressly typified in EXHIBIT 11 to the AGREEMENT.
- 1.2. The CONCESSIONAIRE will be subject to penalties for non-compliance with service levels in the exact terms set out in EXHIBIT 11 of the AGREEMENT, therefore, it is emphasized that the CONCESSIONAIRE shall size and manage its resources, at its own risk, in order to meet the service levels and obligations set out in the AGREEMENT.
- 1.3. For the purposes set forth in the AGREEMENT, the following definitions shall be considered:
- 1.3.1. **Operability of an equipment or system.** Capacity to function properly, complying with, fully and simultaneously, all the functional requirements that appear in the EXHIBITS 5, 6 and 7 to the AGREEMENT and the rules established by the applicable technical specifications and in force.
- 1.3.2. **Inoperative or non-operational equipment or system.** The one that does not meet all the established operationality requirements.
- 1.3.3. **Operational equipment.** The one that meets all the established operationality requirements.
- 1.3.4. **Equipment inoperability.** In the event there is equipment inoperability due to scheduled maintenance and/or certification procedures and previously communicated to the REGULATORY AUTHORITY, the procedures, deadlines and other conditions formally established by the REGULATORY AUTHORITY and the GRANTING AUTHORITY shall be complied with.
- 1.3.5. When equipment or system with critical, complex and systemic failures with relevant impact to the operation are detected, the CONCESSIONAIRE shall, within a maximum of two (2) hours, inform the REGULATORY AUTHORITY.

## 2. OPERATIONAL SERVICE LEVELS

SCOPE	SERVICE LEVEL
<b>Winch Service</b>	<ul style="list-style-type: none"> <li>Time of arrival at the service location: until twenty (20) minutes in ninety percent (90%) of the services; in the remaining ten percent (10%), no more than sixty (60) minutes.</li> </ul>
<b>APH Service</b>	<ul style="list-style-type: none"> <li>Time of arrival at the service location: until twenty (10) minutes in ninety percent (90%) of the services; in the remaining ten percent (10%), no more than twenty (20) minutes.</li> </ul>
<b>Mechanical Help Service</b>	<ul style="list-style-type: none"> <li>Time of arrival at the service location: until twenty (20) minutes in ninety percent (90%) of the services; in the remaining ten percent (10%), no more than sixty (60) minutes.</li> </ul>
<b>Animal Apprehension Service</b>	<ul style="list-style-type: none"> <li>Time of arrival at the service location: until 40 minutes</li> </ul>
<b>Fire Fighting Service</b>	<ul style="list-style-type: none"> <li>Time of arrival at the service location: until 30 minutes</li> </ul>

<b>Collection System</b>	<ul style="list-style-type: none"> <li>The system should be one hundred percent (100%) operational. For this, the CONCESSIONAIRE shall have equipment or vital parts of the systems in reserve for immediate replacement. There shall also be a technical team on duty twenty-four (24) hours to proceed with the immediate replacement or repair of equipment with problems.</li> </ul>
<b>Speed Control System</b>	<ul style="list-style-type: none"> <li>Maintain the certification of speed control equipment and send copies of the Verification Certificates issued by the competent authority, within the deadlines and conditions stipulated by the REGULATORY AUTHORITY;</li> <li>It shall operate every day of the week, including Saturdays, Sundays and holidays, twenty-four (24) hours a day. When this period is not observed by the CONCESSIONAIRE, the daily inoperative time will be recorded, for the purpose of calculating the monthly inoperative time. The fixed speed control point shall not present a sum of inoperative times greater than eight (8) hours during the period of one month;</li> <li>Keep the Monthly Index of Utilization of the infraction records above the minimum limit required by the GRANTING AUTHORITY;</li> <li>Maintain the regularity of the numerical sequence of the infraction records;</li> <li>Enter correct information in the data check and in the file names of the infraction records</li> </ul>
<b>Radio System</b>	<ul style="list-style-type: none"> <li>The operability of the Radio System (Fixed, Mobile, and Portable Stations) shall be ninety-seven percent (97%), per piece of equipment, for the period of one month.</li> <li>The operability of the Radio System (Repeater Stations) shall be ninety-seven percent (97%), per station, for the period of one month.</li> </ul>
<b>Data Transmission System</b>	<ul style="list-style-type: none"> <li>The Operability of the Data Transmission System shall be one hundred percent (100%).</li> <li>When equipment or system with critical, complex and systemic failures with relevant impact to the operation are detected, the CONCESSIONAIRE shall, within a maximum of two (2) hours, inform the REGULATORY AUTHORITY.</li> </ul>
<b>CCO</b>	<ul style="list-style-type: none"> <li>The CCO shall operate twenty-four (24) hours a day, every day of the week, including weekends and holidays.</li> <li>When equipment or system with critical, complex and systemic failures with relevant impact to the operation are detected, the CONCESSIONAIRE shall, within a maximum of two (2) hours, inform the REGULATORY AUTHORITY.</li> </ul>
<b>Variable Message Signs (PMVs) System</b>	<ul style="list-style-type: none"> <li>Each PMV shall remain in operation for at least 97% of the total number of hours in a month.</li> <li>The PMVs shall remain on twenty-four (24) hours a day, including weekends and holidays, permanently transmitting messages.</li> </ul>
<b>Lane Beaconing System</b>	<ul style="list-style-type: none"> <li>Each equipment shall remain in operation for at least 97% of the total number of hours in a month.</li> </ul>
<b>Automatic Gate System</b>	<ul style="list-style-type: none"> <li>Each equipment shall remain in operation for at least 97% of the total number of hours in a month.</li> </ul>
<b>User Emergency Communication System</b>	<ul style="list-style-type: none"> <li>Each equipment shall remain in operation for at least 97% of the total number of hours in a month.</li> </ul>

<b>Megaphone/Sound System</b>	<ul style="list-style-type: none"> <li>Each equipment shall remain in operation for at least 97% of the total number of hours in a month.</li> </ul>
<b>User Communication System via Wireless Data Network</b>	<ul style="list-style-type: none"> <li>The Performance Index, as described in EXHIBIT 5, shall be equal to or greater than ninety percent (90%);</li> </ul>
<b>Traffic Sensing System</b>	<ul style="list-style-type: none"> <li>Each traffic sensor shall remain in operation for at least 97% of the total number of hours in a month.</li> </ul>
<b>Travel Time Control System</b>	<ul style="list-style-type: none"> <li>Each piece of license plate recognition (OCR) equipment shall remain in operation for at least 97% of the total number of hours in a month.</li> </ul>
<b>CCTV Traffic Monitoring System</b>	<ul style="list-style-type: none"> <li>Each piece of CCTV equipment (camera) shall remain in operation for at least 97% of the total number of hours in a month.</li> </ul>
<b>Remote service equipment</b>	<ul style="list-style-type: none"> <li>Equipment in operation 24 hours a day, 7 days a week, including Saturdays, Sundays, and holidays, with immediate replacement by an on-site attendant in case of equipment failure (for any reason), or scheduled maintenance.</li> </ul>
<b>Fire detection and alarm system</b>	<ul style="list-style-type: none"> <li>The Operability of the System shall be one hundred percent (100%).</li> <li>When equipment or system with critical, complex and systemic failures with relevant impact to the operation are detected, the CONCESSIONAIRE shall, within a maximum of two (2) hours, inform the REGULATORY AUTHORITY.</li> </ul>
<b>Automatic Gate System</b>	<ul style="list-style-type: none"> <li>Each equipment shall remain in operation for at least 97% of the total number of hours in a month.</li> </ul>
<b>Ventilation system</b>	<ul style="list-style-type: none"> <li>The Operability of the System shall be one hundred percent (100%).</li> <li>When equipment or system with critical, complex and systemic failures with relevant impact to the operation are detected, the CONCESSIONAIRE shall, within a maximum of two (2) hours, inform the REGULATORY AUTHORITY.</li> </ul>
<b>Supervision and Control System</b>	<ul style="list-style-type: none"> <li>The system should be one hundred percent (100%) operational. For this, the CONCESSIONAIRE shall have equipment or vital parts of the systems in reserve for immediate replacement. There shall also be a technical team on duty twenty-four (24) hours to proceed with the immediate replacement or repair of equipment with problems.</li> </ul>
<b>Inspection Control System</b>	<ul style="list-style-type: none"> <li>All equipment/subsystems that comprise the system shall have ninety-nine-point five percent (99.5%) operability.</li> </ul>