



Governo do Estado do Rio de Janeiro

ANNEX X - WATER SUPPLY SYSTEM RULES

CHAPTER I - GENERAL PROVISIONS

Art. 1. These rules establish the regulation of the operation of the Water Supply System (WSS) associated with the regionalized provision of water supply services of the STATE, with a view of outlining the responsibilities and attributions among all the members of the WSS and in order to define the governance structure for its relationship, in addition to the regulation of the AGREEMENT and its ITB, the WATER PRODUCTION AGREEMENT and the ANNEX VI - INTERDEPENDENCE AGREEMENT.

§1. The rules set out in this regulation shall apply to the CONCESSIONAIRES of public water supply services in the METROPOLITAN REGION OF RIO DE JANEIRO, in the scope of the BLOCKS, and to CEDAE.

§2. The REGULATORY AGENCY shall be responsible for the surveillance of the governance structure of the WSS, pursuant to Article 4 of State Law no. 4.556/2005, of the Cooperation Agreement entered into by the STATE and the METROPOLITAN REGION OF RIO DE JANEIRO, the MANAGEMENT AGREEMENT and the AGREEMENT.

CHAPTER II - DEFINITIONS

Art. 2. In addition to the definitions provided for in the AGREEMENT and the WATER PRODUCTION AGREEMENT, the following are the definitions required by the WSS:

I. **Operational Control Center (OCC):** unit responsible for managing the operation of the entire Macro Treated Water Supply System of the Metropolitan Region of Rio de Janeiro (RMRJ).

II. **Primary Measuring Device or Element:** device that is in contact with the flowing fluid and is responsible for generating the primary form or signal that will be interpreted or processed by the secondary measuring device.

III. **Secondary Measuring Device or Element:** electronic device that receives the hydraulic or electrical signal from the primary element and interprets or processes it, generating the flow data. The secondary device is also responsible for transmitting the signal to the OCC.

IV. **Measurement and Control Structure (MCS):** installation that measures pressures and flows in running pipelines and by-passes, as well as regulates the flow of water by means of remote-controlled control valves.

V. **Pitometric Station (PS):** place where the Pitot Tube is inserted in the pipe for measuring flow and pressure and may consist of one or two taps (or ball valves) installed with a 90° gap in a same cross section of the pipe, usually inside a shelter built in masonry, concrete or staves.

VI. **Hydrodynamic Model of the Adduction System:** computational model of treated water supply systems (*digital twin*), built and calibrated in specialized *software* for modeling complex hydraulic systems capable of simulating the operation of the system on a permanent basis and at an extended time, such as WaterGems, by Bentley, or Kypipe, by Kypipe, or others that are similar and meet the proposed objectives.

VII. **Measuring Point (MP):** physical structure that comprises the flow meter itself (primary device), its secondary device and the pitometric station used to perform its calibration. In most cases, the Measuring Point is composed by two masonry shelters, concrete, usually underground boxes, one with the meter and all the control structure of the station, and the other, in which the pitometric station is installed, in addition to a point for water sample collection for quality analysis.

VIII. **Macro Treated Water Supply System (MSS):** Guandu, Ribeirão das Lajes, Acari and Imunana-Laranjal Water Supply Systems, with a nominal diameter of 800 mm (eight hundred millimeters) or more, whose point of origin is not one of the reservoir centers of the distribution system, except for the cases that may be pointed out in the Modeling and Design studies for the implementation of the OCC, in accordance with the terms set out in this instrument.

CHAPTER III - GOVERNANCE PRINCIPLES AND GUIDELINES OF THE WATER SUPPLY SYSTEM (WSS)

Art. 3. The governance structure of the WSS, integrated in the regionalized provision of water supply services in the systems of the Metropolitan Region of Rio de Janeiro shall comply with the following principles:

I. Publicity and transparency in the dissemination of data and information related to the operations of water production and distribution between the BLOCKS;

II. Adoption of arbitration as a dispute resolution mechanism involving the relations arising from the WSS;

III. Reliability of the implementation of the OCC's control and measurement solutions;

IV. Technological updating of the means to control the quality and quantity of water production and distribution between the BLOCKS;

V. Self-responsibility for the maintenance of the infrastructure and water production and distribution networks, in accordance with the CONCESSION AREA of each BLOCK, as well as the infrastructure under CEDAE;

VI. Adoption of methods, procedures, mechanisms, techniques and solutions that take into account the particularity of the system;

VII. Environmental efficiency and sustainability in the distribution and maintenance of quality of the water;

VIII. Safety, quality and durability in maintaining adequate levels of water availability in the system;

IX. Preventive control with a view to mitigating potential future deficits in water production and distribution; and

X. Universalization of water supply.

Art. 4. The governance of the WSS must follow the following guidelines:

I. Regionalization: the activities inherent in the provision of water production and distribution services must respect the boundaries of the geographical area defined for each BLOCK;

II. Preventive control: the CONCESSIONAIRE whose service provision depends on infrastructure located outside the geographic area of its BLOCK (located in a geographic area that relates to another BLOCK) may demand from the REGULATORY AGENCY and the OCC the provision of information, as well as carry out regular inspections to verify the water flow and the maintenance conditions of said infrastructure;

III. Collaboration: the CONCESSIONAIRES operating in the Metropolitan Region of Rio de Janeiro, together with CEDAE and the RIO METROPOLE INSTITUTE, shall join efforts to ensure the satisfactory provision of water supply services, with a view to planning the hiring and monitoring of services for the installation of automated telemetry systems, as well as the creation of a database for measuring water production and regional water consumption in each BLOCK;

IV. Dispute Resolution: the amicable resolution of conflicts between the parties should be prioritized, based on alternative mechanisms of mediation and resolution of disputes, in the event of issues and/or conflicts, disputes and divergences, adopting arbitration as the mechanism to settle disputes between any of the CONCESSIONAIRES that operate in the Metropolitan Region of Rio de Janeiro, CEDAE, and the RIO METROPOLE INSTITUTE, including in regard to the measurement of the amount of water produced and/or distributed to the BLOCKS, pursuant to the CONCESSION AGREEMENT and the INTERDEPENDENCE AGREEMENT; and

V. Hierarchy: the decisions on potential conflicts, disputes and divergences in the measurement of the quantity and quality of the water produced and distributed between the blocks shall have the REGULATORY AGENCY as definitive administrative level of resolution, without prejudice of arbitration.

CHAPTER IV - WATER SUPPLY SYSTEM BOARD

Art. 5. The REGULATORY AGENCY shall institute, within 30 (thirty) days as from the execution of the AGREEMENT, the WATER SUPPLY SYSTEM BOARD, composed by representatives of each of the four CONCESSIONAIRES associated to each one of the BLOCKS that integrate the regionalized provision of sanitation in the State of Rio de Janeiro, of the RIO METROPOLE INSTITUTE, of CEDAE, of the STATE and the REGULATORY AGENCY, whose attribution shall be to foster the liaison and the interaction between all the parties that integrate the WSS, with the purpose of promoting any convenient or necessary actions and measures aiming to improve such system, as well as to issue decisions, observing the limits established in this instrument.

§1. Within 15 (fifteen) days after the execution of the AGREEMENT, each of the CONCESSIONAIRES referred to in art. 5, as well as the STATE, CEDAE and the RIO METROPOLE INSTITUTE shall submit to the REGULATORY AGENCY the name of their representative and alternate member to compose said Board, and the REGULATORY AGENCY shall also appoint their representative and alternate member of the Board.

Art. 6. The WATER SUPPLY SYSTEM BOARD shall be composed of eight members, one representative of the BLOCK 1 CONCESSIONAIRE; one representative of the BLOCK 2 CONCESSIONAIRE; one representative of the BLOCK 3 CONCESSIONAIRE; a representative of the BLOCK 4 CONCESSIONAIRE; a representative of the STATE; a representative of CEDAE; a representative of the RIO METROPOLE INSTITUTE and a representative of the REGULATORY AGENCY.

Art. 7. Should there be a need for decisions by the WATER SUPPLY SYSTEM BOARD on matters under its jurisdiction, each member shall have one vote, and decisions shall be by simple majority.

Art. 8. The WATER SUPPLY SYSTEM BOARD shall be originally chaired by the RMI representative, and at the first meeting of the board, its members will vote for the election of a new chairman.

§1. The WATER SUPPLY SYSTEM BOARD may only be chaired by a representative appointed by the AGENERSA or by the RMI;

§2. The chairman of the WATER SUPPLY SYSTEM BOARD shall be responsible for convening meetings of the WATER SUPPLY SYSTEM BOARD, with prior announcement of the agenda of matters to be discussed or decided, for chairing the meetings, receiving the statements, claims and contributions of each of its members, with a view to addressing the respective discussions and decisions in a timely manner.

§. 3. The call for meetings of the WATER SUPPLY SYSTEM BOARD may be made by simple e-mail message (with confirmation of receipt), by telephone contact (provided that the notification is otherwise certified) or by any other effective means.

§. 4. The WATER SUPPLY SYSTEM BOARD meetings may take place at the premises of the REGULATORY AGENCY, the STATE, CEDAE, the RIO METROPOLE INSTITUTE or the CONCESSIONAIRES, with the agreement of the respective responsible person, or in any other place that its members might deem appropriate.

§. 4. At the end of each meeting of the WATER SUPPLY SYSTEM BOARD, a descriptive minute shall be drawn up, which will be sent to the REGULATORY AGENCY for filing.

Art. 9. In compliance with the provisions of art. 7, the members of the WATER SUPPLY SYSTEM BOARD shall decide on a supplementary regulation for the operation of the WATER SUPPLY SYSTEM BOARD, with a view to accomplishing the purpose of exchanging information and opinions between the WSS members and the members of the WATER SUPPLY SYSTEM BOARD concerning the adequacy and efficiency of the WATER SUPPLY SYSTEM in the context of the regionalized provision of supply services in the State of Rio de Janeiro.

CHAPTER V - WATER SUPPLY SYSTEM MANAGEMENT

Art. 10. The RIO METROPOLE INSTITUTE shall be the entity responsible for the management of the WSS, comprising the management of the MSS, through the OCC, the monitoring and provision of relevant technical information regarding the flow of water in the macro meters, according to the conditions and limits established in this instrument.

§1 In order to carry out the roles assigned to them, the RIO METROPOLE INSTITUTE shall be responsible for the full implementation of the OCC, pursuant to art. 17, which shall occur within 3 (three) years from the execution of the AGREEMENT, as well as its management throughout the term of the CONCESSION, in accordance with the provisions of this instrument.

§2 Until the start of the operation of the OCC, the RIO METROPOLE INSTITUTE shall be responsible for the management of a provisional control and operation center for the WSS, in accordance with this instrument, ensuring appropriate conditions for the management of the MSS, as well as for the provision of technical information regarding the water flow in the macro meters.

Art. 11. The WSS's control and provisional operation center, as well as the OCC, shall be composed of a maximum of 22 (twenty-two) professionals, one of whom shall be the general manager, another one to carry out the technical coordination and 20 with the technical operation positions.

§1 The general management and technical coordination positions referred to in the *caput* shall be filled by professionals appointed by the STATE, and the technical operation positions shall be filled by professionals appointed by the CONCESSIONAIRES, pursuant to the §§s below.

§2 The STATE shall formalize to the RIO METROPOLE INSTITUTE, within 30 (thirty) days as from the execution of the AGREEMENT, the appointment of 2 (two) professionals to compose the provisional control and operation center, one for the general management position and the other one for the general coordination position.

§3 Each of the CONCESSIONAIRES linked to each of the BLOCKS shall formalize to the RIO METROPOLE INSTITUTE, within a period of up to 60 (sixty) days as from the execution of the AGREEMENT, 5 (five) professionals for the technical operation positions, or a lower number of professionals, provided that it is sufficient for the adequate operation of the provisional operational control center.

§4 Each of the CONCESSIONAIRES shall appoint an equivalent number of professionals to compose the provisional operational control center and the OCC, and the total number of positions of technical operation shall be decided by the WATER SUPPLY SYSTEM BOARD, observing the maximum number of professionals referred to in §3, which can only be exceeded exceptionally and justifiably.

§5 The professionals appointed by the STATE and by the CONCESSIONAIRES must have technical skills in the performance of similar or equivalent activities to those inherent to the positions of the operational control center.

§6 The same professionals that compose the provisional control and operations center shall compose the OCC, whenever it is available.

§7 The RIO METROPOLE INSTITUTE may justifiably request the replacement of professionals, as well as the STATE, and the CONCESSIONAIRES may propose to the RIO METROPOLE INSTITUTE the replacement of the professionals, at any time, observing the need of demonstration of technical background in similar or equivalent activities by any such new professional.

§8 For the management and operation of the OCC, the RIO METROPOLE INSTITUTE may, alternatively to the integration of professionals appointed by the CONCESSIONAIRES, hire companies or entities qualified to do so, provided that it is demonstrated that this solution is the least expensive for the performance of the inherent activities.

§9. The remuneration of the professionals that will compose the provisional control and operation center and the OCC, including those appointed by the STATE, as well as all the costs and expenses of the management of these centers, will be defrayed exclusively by the CONCESSIONAIRES, equally, each one answering for the fraction of $\frac{1}{4}$ (one quarter) of the total amount incurred.

§10. The remuneration of the professionals will be negotiated directly between them and the CONCESSIONAIRES, and any of the CONCESSIONAIRES may submit a request to the RIO METROPOLE INSTITUTE for a new appointment by the STATE, or a new appointment by other CONCESSIONAIRE(S), when the proposed amount of remuneration is not in accordance with market standards or nominally exceeds the amount of R\$ 40,000.00 per professional, corrected annually by the variation of the IPCA.

§11. It shall be incumbent on the CONCESSIONAIRES to decide on the mode of sharing the remuneration of the professionals appointed by them, whether by their availability or by the distribution of the amounts of remuneration.

Art. 12. It shall be also incumbent on the RIO METROPOLE INSTITUTE to make available on its website, every quarter, a report issued by the OCC, with information on the quantity and quality of the water produced and distributed within the BLOCKS of the Rio de Janeiro Metropolitan Region, as well as the information provided for in art. 13, I, "b" of State Complementary Law 184/2018;

Art. 13. The OCC shall have the following technical attributions:

I. To constitute an integrated system of information on the technical measurements concerning the supply by CEDAE and the consumption of water by the CONCESSIONAIRES;

II. To provide the services of technical assessment of consumption data, flow and management of the process of quantification of values for billing by CEDAE and payment by each CONCESSIONAIRE of the monthly consumption of water provided, pursuant to the terms established in this instrument;

III. To prepare and send to the REGULATORY AGENCY, monthly, from the start of its operation, a report containing information on the quantity and quality of water produced and distributed within the BLOCKS that make up the Metropolitan Region of Rio de Janeiro;

IV. To manage the entire MSS operation of RMRJ, which encompasses the definition of operational guidelines to be followed by the operational teams (i.e. : on-site teams) of the CONCESSIONAIRES, maintenance of MSS's calibrated hydrodynamic model (i.e.(i.e.: *digital twin*), the reception, processing and interpretation of MPs signals and information, and the operational control of the CMSs installed along the MSS lines, in order to ensure that the volumes and flows planned by the CONCESSIONAIRES or the limits imposed by the REGULATORY AGENCY are met.

Art. 14. The CONCESSIONAIRES shall be responsible for carrying out all the predictive, preventive and corrective maintenance actions in the sections of the MSS pipelines located

within their territorial areas of operation, as well as for following the operational guidelines and carrying out the local intervention actions established by the OCC.

Art. 15. The OCC shall be implemented by qualified company(ies) or entity(ies), hired by the RIO METROPOLE INSTITUTE, at the expense of the CONCESSIONAIRES, in accordance with the provisions of this instrument.

§1. The company(ies) and/or qualified entity(ies) hired by the RIO METROPOLE INSTITUTE for the implementation of the OCC shall have technical experience in the performance of similar or equivalent services and shall be remunerated by the CONCESSIONAIRES for the provision of said services, the supply of the goods and the performance of the works required for the conclusion of the scopes referred to below.

§2. The costs related to the hiring referred to in art. 15, concerning the implementation of the OCC, as well as all costs inherent to its operation, including all costs and operating expenses incurred, shall be borne exclusively by the CONCESSIONAIRES, with each CONCESSIONAIRE being responsible for bearing $\frac{1}{4}$ (one quarter) of the resulting total amount, throughout the entire term of the CONCESSION.

§3. The RIO METROPOLE INSTITUTE shall bear the cost of its employees and agents that might be allocated in the implementation and operation of the OCC.

§4. The company(ies) and/or entity(ies) hired for the purposes of art. 15 shall issue directly to each of the CONCESSIONAIRES the invoice corresponding to the payment of their respective share of the services rendered by it, and each of the CONCESSIONAIRES shall be responsible for making the respective payment directly.

§5. The company(ies) and/or entity(ies) hired for the purposes of art. 15 shall inform the RIO METROPOLE INSTITUTE of any default by any CONCESSIONAIRE regarding the payment of its share.

§6. The default of the obligation to pay its respective share shall subject the CONCESSIONAIRE to the application of the same penalties provided for in the AGREEMENT for the default of the distribution of the minimum volume of drinking water to the downstream CONCESSIONAIRE, to be applied by the REGULATORY AGENCY, in the scope of the legal relationship of the CONCESSION, pursuant to sub-clause 37.5.6 of the AGREEMENT.

§7. The RIO METROPOLE INSTITUTE may replace any of the companies or entities responsible for the implementation of the OCC, provided there is prior consent by CEDAE and the CONCESSIONAIRES.

Art. 16. The REGULATORY AGENCY is responsible for:

I. Carrying out ordinary inspections, every 6 (six) months, or upon a substantiated request by any of the CONCESSIONAIRES or by CEDAE, of the water pipeline infrastructure of the BLOCKS, responsible for the delivery of water between the CONCESSIONAIRES;

II. Carrying out regular inspections every 6 (six) months, of the raw water and treated water reservoirs that serve the WSS and issuing reports on the potability status of the water;

III. Managing the Metropolitan Region's water production and supply system with regard to issues related to water safety, in order to propose solutions that ensure its resilience and mitigate any future deficits;

IV. Supervising the coordination, management and operation of the large pipelines by the OCC and by the operational teams of the CONCESSIONAIRES, defining the daily flow limits that each

CONCESSIONAIRE may collect for its distribution and defining the volume of water that each CONCESSIONAIRE must ensure is delivered to the CONCESSIONAIRES downstream the pipeline;

V. Acting as the final administrative level for the resolution of disputes between the CONCESSIONAIRES of the BLOCKS for the regionalized provision of water services in the system of the Metropolitan Region of Rio de Janeiro, and between them and CEDAE, as well as of conflicts involving the RIO METROPOLE INSTITUTE.

VI. Decide on the allocation of the daily minimum flow of drinking water to be supplied by CEDAE to each BLOCK, based on the submission, by each CONCESSIONAIRE, of the estimated planning of the necessary demand to be supplied by CEDAE, taking into account the water context and the information provided by CEDAE.

CHAPTER VI - PROCEDURE FOR IMPLEMENTING THE OPERATIONAL CONTROL CENTER

Art. 17. The implementation of the OCC shall be divided into four stages:

- I. Modeling;
- II. Designs;
- III. Works; and
- IV. Commissioning.

Art. 18. The Modeling stage is composed by the activities of preparation of local technical studies of Measuring Points (MP) and Measurement and Control Structures (MCS), any registration complementation and development of hydrodynamic modeling of the Macro Treated Water Supply System (MSS) (i.e.: development of *digital twin*). At this stage, the installation sites of Measurement Points (MP) and Measurement and Control Structures (MCS) that will be used by the Operational Control Center (OCC) for the management of RMRJ's MSS will be confirmed.

§1 The company(ies) or entity(ies) hired by the RIO METROPOLE INSTITUTE for the development of the Modeling stage of the implantation of the OCC shall, with the collaboration of the CONCESSIONAIRES and CEDAE, which in turn shall be responsible for providing it with information, conclude all the activities of this stage in up to 180 (one hundred and eighty) days, as from the execution of the Concession Agreements, coinciding with the date scheduled for the end of the ASSISTED OPERATION period of teh CONCESSION.

§2 The period provided for in §1 may be extended, provided the Modeling and Design stages are concluded within the term of 360 (three hundred and sixty) days.

Art. 19. The Designs stage is composed by the activities of preparation of basic and executive designs of the Measuring Points (MP), Measuring and Control Structures (MCS) and the Operational Control Center (OCC) itself.

Sole paragraph. The company(ies) or entity(ies) hired by the RIO METROPOLE INSTITUTE for the development of the Designs stage of the implementation of the CCO shall conclude all the activities of the Designs stage within up to 180 (one hundred and eighty) days, as from the date set for the end of the ASSISTED OPERATION period of the CONCESSION.

Art. 20. The Works stage is composed of the activities for the implementation of the OCC and telemetry systems, as previously defined in the Modeling and Design stages.

§1. All the activities of the Works stage for the implementation of the OCC must be performed by companies or specialized entities hired by the RIO METROPOLE INSTITUTE;

§2. All works for the installation of Measuring Points (MP) and Measurement and Control Structures (EMC) will be the responsibility of the CONCESSIONAIRES, as set out in Annex V - CONCESSION TECHNICAL SPECIFICATIONS;

§3. All the activities of the Works stage, as well as the installation of the Measuring Points (MP) and of the Measurement and Control Structures (MCS), which were defined and detailed in the Modeling and Design stages of the implementation of the OCC, must be completed in less than 540 (five hundred and forty) days as from the end of the ASSISTED OPERATION period of the CONCESSION.

Art. 21. The Commissioning stage consists of the pre-operation of the OCC, the MPs and the MCSs, which shall occur within 90 (ninety) days as from the end of the Works stage.

Art. 22. During the implementation period and until the definitive operation of the OCC, the RIO METROPOLE INSTITUTE shall provide the management of the provisional water supply system, using the facilities and structures provided by CEDAE for this purpose, as well as the allocation of professionals technically trained by the CONCESSIONAIRES in order to compose the necessary staff for the technical operation of the system.

§1. The RIO METROPOLE INSTITUTE, in order to ensure the provisional management and operation of the water supply system, may hire a company or entity qualified to do so, the costs of which shall be borne exclusively and in equally by the CONCESSIONAIRES, or, alternatively, use qualified professionals allocated at no cost by the CONCESSIONAIRES, members or not of their staff, with a view to performing the roles required for the operation of the water supply system, under the management and coordination of the RIO METROPOLE INSTITUTE.

§2 The RIO METROPOLE INSTITUTE, in order to ensure the definitive management and operation of the water supply system, through the OCC, may hire a company or entity qualified to do so, the costs of which shall be borne exclusively and in equally by the CONCESSIONAIRES, or, alternatively, use qualified professionals allocated at no cost by the CONCESSIONAIRES, members or not of their staff, with a view to performing the roles required for the operation of the system and the OCC, under the management and coordination of the RIO METROPOLE INSTITUTE.

CHAPTER VII - SYSTEM FLOW RATES MEASUREMENT AND PAYMENT

Art. 23. In the first three years of the CONCESSION AGREEMENTS, each CONCESSIONAIRE shall pay to CEDAE the values referring to the minimum volumes of water, regardless of such

volumes being effectively used by the CONCESSIONAIRE, as set forth by the INTERDEPENDENCE AGREEMENT.

Art. 24. From the start of the fourth year of effectiveness of the CONCESSION AGREEMENTS, the procedure of measurement and payment of the system flows will be as follows:

§1 On the first working day following the submission of the flow measurement report, the period for analysis and/or challenge by the CONCESSIONAIRES and CEDAE regarding the figures of the report shall start.

§2 Within 5 (five) working days of the submission of the flow measurement report, the CONCESSIONAIRES and/or CEDAE may present a challenge to the REGULATORY AGENCY and the OCC concerning the values stated in the report.

§3 After the end of the period established in the above paragraph, without any challenge to the values stated in the report, it shall be understood that the measurement has been accepted, so that CEDAE shall be authorized to issue the invoices concerning the commercialization of water production to the CONCESSIONAIRES of each BLOCK, pursuant to the values established in the flow measurement report.

§4 In the event of challenge by CEDAE or any CONCESSIONAIRE, pursuant to §1, the CONCESSIONAIRE(S) interested in the matter and, as the case may be, CEDAE, shall have up to 10 (ten) working days to, if they will, submit a statement on the challenge presented, and the OCC may also, within this period, rectify the flow measurement report, in which case the period provided for in the caput of Article 22 shall start again.

Art. 25. In case the challenge concerns conflicts or objections regarding the macro measurement of the production of water sold by CEDAE, CEDAE shall issue the invoice in the uncontroversial amount, in up to 10 (ten) working days as from the challenge, and the disputed amount shall only and eventually be invoiced when the decision on the dispute is made by the REGULATORY AGENCY, under the terms of this instrument.

Art. 26. In the event that the challenge concerns conflicts or objections regarding macro measurements or measurements located at the intersection (border points of the Measurement Points) of the infrastructures operated by the CONCESSIONAIRES (between BLOCKS), CEDAE shall be authorized to charge the CONCESSIONAIRES, within a period of up to 10 (ten) working days from the challenge, the respective amounts, under the following conditions:

§1 CEDAE shall issue to each CONCESSIONAIRE receiving the water production an invoice of the uncontroversial value.

§2 CEDAE shall proceed to an equitable division of the disputed amount among the CONCESSIONAIRES involved in the dispute, issuing for each CONCESSIONAIRE an additional invoice corresponding to its share of the controversial amount.

§3 The invoices issued by CEDAE shall be sent to the CONCESSIONAIRE(S) for payment within 5 (five) working days.

Art. 27. Once the statement referred to in §2 of art. 26 is submitted, the REGULATORY AGENCY shall have up to 7 (seven) working days to settle the dispute.

§1 Where possible, the REGULATORY AGENCY shall determine, in its decision, the offsetting of the values between the CONCESSIONAIRES and between them and CEDAE, as the case may be.

§2 In the event of §1, CEDAE may offset the amounts between the CONCESSIONAIRES in the subsequent invoices, in accordance with the terms established by the REGULATORY AGENCY.

CHAPTER VIII - PROCEDURE FOR ALLOCATION OF MINIMUM FLOWS OF DRINKING WATER BETWEEN BLOCKS

Art. 28. Up to sixty (60) days prior to the deadline for the end of the third year of effectiveness of the CONCESSION AGREEMENTS, each CONCESSIONAIRE shall send to the REGULATORY AGENCY the estimated planning of the demand for minimum volume of drinking water to be supplied by CEDAE.

§1 The CONCESSIONAIRES shall, on a monthly basis, send to the OCC and CEDAE, with a copy to the REGULATORY AGENCY, their planning for the three subsequent months, with estimates of monthly volumes and average and maximum daily flows at each of the interconnection points of their systems to the MSS of RMRJ;

§2 The OCC, together with CEDAE, shall analyze the possibility of meeting the volumes and flows planned by the CONCESSIONAIRES.

§3 In case of any impossibility of meeting such targets, due to technical issues related to the MSS (i.e.: operational bottlenecks etc.) or lack of water availability, the REGULATORY AGENCY shall establish the volume shares and the minimum flows to be distributed to each one of the BLOCKS, respecting the technical and operational limits imposed by the existing infrastructure.

§4 The deadline for the CONCESSIONAIRES to submit the information shall be up to two working days after the previous month.

§5 The deadline for the REGULATORY AGENCY to decide on the allocation of volume share and the minimum flows to be distributed to each one of the BLOCKS shall be up to 30 (thirty) days before the end of the previous cycle.

Art. 29. Until the OCC is definitively made available by the RIO METROPOLE INSTITUTE, the CONCESSIONAIRES shall remunerate CEDAE for the minimum flows established in the INTERDEPENDENCE AGREEMENT.

Art. 30. The non-compliance with the daily minimum flows of drinking water to be passed on by each BLOCK shall result in a penalty to the CONCESSIONAIRE in accordance with sub-clause 37.5.6 of the CONCESSION AGREEMENT.

§1. The fine(s) applied to the CONCESSIONAIRE(S) shall be transferred to the CONCESSIONAIRE that did not receive the minimum volume of drinking water as established in the decision by the REGULATORY AGENCY.

§2. The responsibility of the CEDAE for the supply of the minimum volumes of drinking water will be sized by the REGULATORY AGENCY in accordance with the delivery points and the volumes set out in the INTERDEPENDENCE AGREEMENT, therefore any non-compliance with the transfer of the daily minimum flows of drinking water by the CONCESSIONAIRE(S) shall not be characterized as non-compliance by CEDAE.

CHAPTER IX - SHARING OF RESPONSIBILITIES OVER THE MSS

Art. 31. Each CONCESSIONAIRE shall be individually responsible for all costs and expenses of conservation and maintenance of the MSS infrastructures located in its area of operation (area of the BLOCK), answering for the damage and losses that the lack of maintenance, conservation and repair in said infrastructures might generate to third parties, except as provided for in art. 32 of this instrument.

Art. 32. The CONCESSIONAIRES who understand there is the need to expand the MSS's infrastructure, regardless of the area of the concession (area of the BLOCK) in which the expansion is requested, may justifiably submit to the REGULATORY AGENCY a proposal for the expansion of MSS's infrastructure, describing:

- I. The reasons for the need to expand the MSS infrastructure;
- II. The damage, losses and inefficiencies that have resulted or will result from the lack of expansion of such MSS infrastructure;
- III. The specific macro supply structures that need to be expanded, their geographical location and the respective concession area (area of the BLOCK) to which they are linked;
- IV. Whenever applicable, the WATER SUPPLY SYSTEM BOARD decision on the relevance of the performance of such works.

Art. 33. The REGULATORY AGENCY shall analyze the CONCESSIONAIRE's submission within 180 (one hundred and eighty days), approving or justifiably denying the proposal to expand the MSS.

Art. 34. Until the end of said period, the REGULATORY AGENCY may hear the WATER SUPPLY SYSTEM BOARD, where necessary, as well as, and exceptionally, make use of information, analysis and assistance provided by research institutes, external consultancies and technical boards composed for the analysis of the issue.

Art. 35. Any divergence between the CONCESSIONAIRES, the RIO METROPOLE INSTITUTE, CEDAE and the STATE regarding the decision of the REGULATORY AGENCY mentioned in art. 33 may be settled through arbitration, in accordance with the AGREEMENT, WATER PRODUCTION AGREEMENT and MANAGEMENT AGREEMENT.

Art. 36. The investments required for the expansion of MSS infrastructure, with a view to expanding the system, shall be borne by all the CONCESSIONAIRES of the BLOCKS, equally, with the overall value of the investments divided proportionally to the gross revenue of the previous year of each CONCESSIONAIRE.

Art. 37. The management of the implementation of the projects and the works and interventions required for the expansion of the MSS infrastructure shall be the responsibility of

the CONCESSIONAIRE(S) responsible for the respective concession area where the works will be carried out, and all costs and expenses inherent to such management will be shared among all the CONCESSIONAIRES of the BLOCKS, in the proportion equivalent to $\frac{1}{4}$ (one quarter) of the overall value for each of them.

Art. 38. The management of the MSS infrastructure expansion works shall comply with the guidelines of the REGULATORY AGENCY, and, alternatively, the decisions of the WATER SUPPLY SYSTEM BOARD.

Art. 39. The executive designs of the MSS infrastructure expansion works must be submitted for analysis and decision by the WATER SUPPLY SYSTEM BOARD, exclusively for opinion, and to the REGULATORY AGENCY, for its approval.

Art. 40. The start of MSS expansion works shall be preceded by the approval of the executive designs by the REGULATORY AGENCY.

Sole paragraph. For the purposes of assisting their analysis, with a view to deciding on the approval of executive designs referred to in art. 39, the REGULATORY AGENCY may consult with the OCC, as well as, if necessary and exceptionally, with research institutions, external consultancies and technical boards composed by independent specialists.

Art. 41. The MSS expansion works shall be inspected by the REGULATORY AGENCY, from its start until its effective conclusion, in order to verify if they match the approved executive designs or, in case of change or customization of the designs during the performance of works, with a view to better adapt them to new circumstances, the relevance and correction of the solutions implemented by the responsible CONCESSIONAIRE(S).