

Cooperative Research and Development Project between FUB/CDT and TERRACAP

Technical and Economic Feasibility Study for
Digital Capital Technology Park
[Parque Tecnológico Capital Digital – PTCD]

Product 5.6 – Evaluation of Organizational and Management
Aspects

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1 INTRODUCTION

The Companhia Imobiliária de Brasília (Terracap), created under the law nº. 5.861, in December 12 1972, is corporation that belongs to the Federal District Government Governed by the law that created it, by means of the institution's social statute and by the legislation applicable to the societies by actions, Terracap aims at executing, by means of payment, all real state activities interest to the Federal District, including the use, acquisition, management, disposition, merger, encumbrance and disposal of assets.

According to law nº 4.586 of July 13, 2011, Terracap started to also play the role of the Federal District's Development Agency, by means of proposal, operationalization and implementation of economic and social development programs and projects interest to the Federal District, being even able to promote agreements between the public and private sectors, constitute Special Purpose Entities (SPE) and promote joint urban operations to implementation and development of enterprises considered strategically by the Federal District Government. In this context, Terracap is an important vector of public politics that are defined in the programs that are being implemented by the current Federal District Government, especially when it refers to the Digital Capital Science Park - PTCD.

Having in mind a cooperation among FUB and the Union's Assets Department – SPU, the Ministry of Planning, Budget and Management, which has been on since January 2009, with the coordination of the Decision-Making Technologies Laboratory – LATITUDE, UnB's Department of Electric Engineering, by means of three structuration projects of processes, methodologies and SPU's management tools, Terracap verified that the approach used in handling the Union's assets could be extended and applied to the District's assets, especially concerning the PTCD project management.

Besides that, the topics concerning the strategies of the PTCD implementation were approached in UnB's early studies, demanded by the GDF (Project FAPDF-FUB, 2008), giving conditions to subject PTCD management be handled with previous knowledge of the matter. Such experience justifies the participation of the LATITUTDE laboratory staff in this new situation. Considering that PTCD is a park destined for information and communication technologies, in its feasibility study, the following questions must be answered: Types and sizes of ICT that can integrate the park, types of services and products of major potential, productive capacity, necessities and existence of professional competencies (electric engineers, network engineers, computational

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engineers, production engineers, automation and control engineers, computer scientists, information engineers and technologists), academic unities able to research, innovate and transfer technologies to the park, etc.

Thus, and considering CDT/UnB's extensive experience in elaborating the studies on technical and economic feasibility (EVTEC), Terracap and the LATITUDE Laboratory, counting with the support of CDT/UnB, started talking about the possibility of putting the cooperative research and development project in practice; and, in the context of improving the district assets management and promoting strategic enterprises for the Federal District, looking forward to put the EVTEC in practice in reference to the PTCD.

As a result, it was established a contract between Terracap and FUB, having as object a technology and information services project that aims at supporting the implementation of the PTCD, acting in the elaboration of products that make part of the correspondent Technical and Economic Feasibility Study.

Among the deliverable products of this project, the “Product 5.6 – Evaluation of Organizational and Management Aspects”, which is the object of this technical report.

This product aims to indicate the conditions of the enterprise's organizational management to be developed, specifically in what refers to defining the probable organizational structure and company to be developed in the Lot 1 area of the PTCD, from the preliminary parameters from the Government decisions for the area of the Park.

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2 DEFINING THE ORGANIZATION STRUCTURE

2.1 MANAGEMENT MODELS OF TECHNOLOGY PARKS

While it is an area in constant development, currently it is possible to identify some park models spread out worldwide (HAUSER; ZEN, 2004):

- **Californian Model:** They are promoted or linked to Universities. They are related to high-tech and developing segments as well as of extremely high added value. They take maximum advantage of the region attracting capacity as well as the commercial value of research developed by the University. It is about spontaneous phenomena without initial planning; there are no pre-intentions to constitute an element of regional development. They are self-financed and self-sufficient projects, able to provide return on investment to their promoters.
- **British Model:** They are created by universities and installed in their campi. They area centered around research and development activities, as well as labs/companies, among others. The start-ups are considered important elements on the Parks.
- **North-European or Scandinavian Model:** Adequate model for heightened economic development or of great growth, and with a business culture that relies on free competition. This model presents the greatest number of successful cases because it harmonically conjugates the best features of other existing models. It has small or average area, projects promoted with the participation of universities, public organizations and private initiative. They have specialized management teams, very much involved in the aspects of fostering technology transfer and commercial insertion on international product and services market;
- **Mediterranean Model:** Developed in countries of Southern Europe, they are promoted by public entities; they area conceived as regional development instruments. They are related to occupying large areas.

By the definitions above, we can state that the Lot 1 of the Capital Digital Technology Park – PTCD is basically a Mediterranean Model Park, since it is a SPE between Terracap (The District's Govern) and a private partner.

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2.2 EXAMPLES OF TECHNOLOGY PARKS MANAGEMENT

With the intent of modeling an organizational Structure for the company that will manage Lot 1 of the Capital Digital Technology Park – PTCD, we researched existing experiences, presenting some models of organizational structure of Parks in Brazil and abroad.

The criteria for choosing the parks presented here as examples area the following:

- Park dimension;
- Time of existence;
- Acknowledgment of management quality¹.

To understand this better, the Parks webpages references are transcribed so to contextualize the choices and reasoning subjacent to each organizational structuration.

2.2.1 TECNOPUC

The concept of Tecnopuc is much similar to the Californian model of the Technology Park. The appearance was spontaneous because at the moment of its conception the predominant will was taking advantage of the large critical mass of masters and doctors researchers that were already developing research projects with contracts with big companies. These projects demanded more space, and the availability of a 5.4 hectare are, which had recently been acquired by PUCRS university, provided conditions for the project becoming a success.

The rectory of the university invested in participating of events so that the responsible people for the elaboration of the project that designed the technology parks could get to know what was there in Brazil and abroad in the area of Technology Parks. After many visits a project of technology park was presented to the Superior Administration of the University. This project was based on a partnership between university and company, developed with the support of public organs, within the area of Projeto Porto Alegre Tecnopole. Following, there is a brief description of the partnership model adopted in the Tecnopuc to attract companies.

¹ ANPROTEC, an entity that encopasses the Parks and Startups in Brazil, chooses every year the startups and the technology parks considered as a reference. The TECNOPUC has been chosen once and Porto Digital twice.

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2.2.1.1 Tecnopuc Management Model

The Tecnopuc, since its creation, was visualized as an innovation environment that searches to create value through exploring the university-company relationship. The interaction model chosen was proposed by Cunha (1998), which based in studies carried out at the MIT and on the work developed by Rogers (1996), structured a symbiotic partnership relation, in which companies and universities have benefits. In this model, companies became more open and universities started to re-think their role in this new reality. Thus, the university started to abandon the notion of free technology transfer, establishing a continuous bidirectional trade between partners (AUDY; FRANCO; MOSCHETTA, 2003).

The management of the Tecnopuc is responsibility of the Agency for Technology Management - a department of the university in charge of executing the policies defined by the Steering Committee, presided by the Vice-Rector of Research and Post-Graduation and integrated by the Vice-Rectories of Administration and Finance and Extension, as well as the Legal Service. The AGT, besides managing the Tech Park acts on the interaction university-business and on protecting intellectual property. (ZEN; HAUSER, 2004)

As the Tecnopuc is inserted in the context of the Porto Alegre Tecnopole, which is an initiative of the city of Porto Alegre to transform the region in a place for technology and science innovation aiming socioeconomic development, the greatest expectation with the creation of the Tech Park was related to creating, investigating and consolidating the cooperation networks.

Nowadays the Tecnopuc is a multidisciplinary Tech Park aimed to IT and Telecom areas, as well as energy, biotechnology and health care.

The Organizational Structure Model of Tecnopuc is presented in Figure 2.1.

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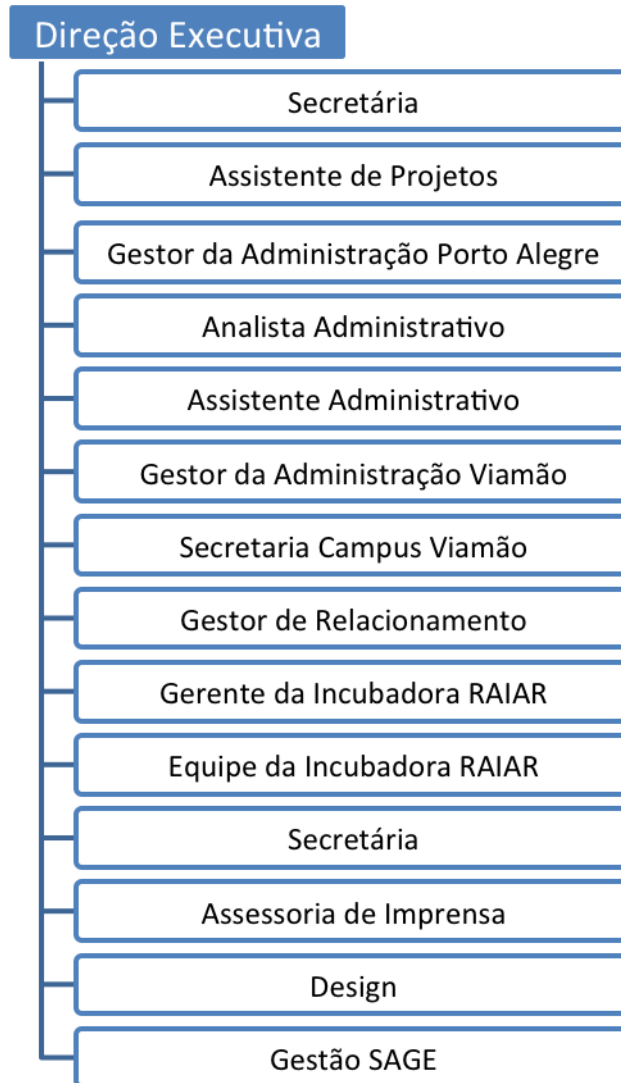


Figure 2.1 - Organizational Structure of Tecnopuc

2.2.2 SAPIENS PARK

The management and implementation of the SAPIENS PARK are under the responsibility of the SAPIENS PARQUE S.A., a Special Purpose Organization (SPE) created in the form of a private company, which has the specific objective of executing the regional development project called SAPIENS PARQUE.

Using the legal solution of a special purpose company in the way mentioned above is result of an intensive legal study of the situation put in the context of the project and the modalities largely employed nationally and internationally in projects of such magnitude.

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The constitution of a new legal corporate status constitutes in itself an attractive solution for the case because it brings with itself an excellent degree of security. The asset and obligation difference between this legal model and the initial participants of the project and any other that could possibly make part, reduce the business risks to the participants and add to that it stops direct contamination among the other legal relationships of the latter with the own object of the project.

On the other side, even looking more complex, there is a more concise and dynamic solution. The legal entity created can participate of several legal relationships, fulfilling the aspirations of the project on being flexible to the opportunities of business, adding to other attributes, such as controller of complying with the rules of occupation and coexistence in the Park, being especially prepared to conclude the contracts as intended on the legal relationships of the end activity of the Sapiens Park project. The SPEs are normally employed in a model of financing engineering known as "project finance" - a tool that can perfectly be further employed in the Sapiens Park Project.

The Sapiens Park S.A. has the specific purpose of structuring, enabling, implementing and operating the Sapiens Park enterprise. It has Administration Council and an Executive Board formed by the associates' representatives, CODESC, CERTI and Sapiencia, with the organizational structure according to Figure 2.2 below.

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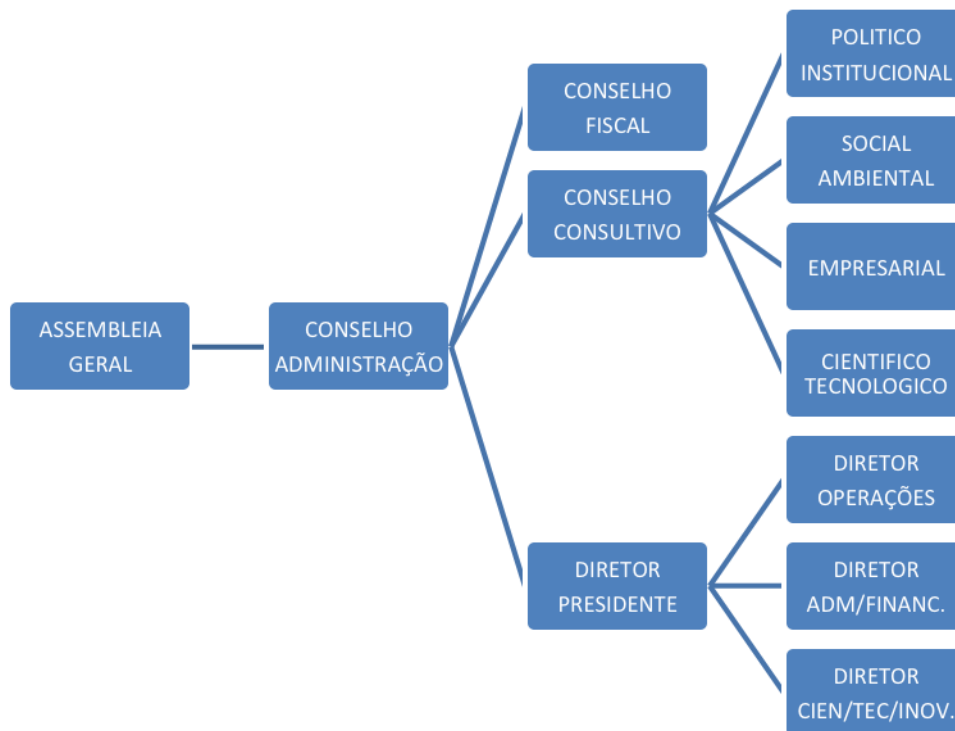


Figure 2.2 - Organizational Structure of the SAPIENS PARK

Among the most important partners of the SAPIENS PARK S.A., we cite the following institutions:

- The CERTI Foundation (Reference Center in Innovative Technologies) is an independent institution and non-profit of research and technological development focusing in innovation on business, products and services on the IT segment. It is a great idealizer and manager of the Sapiens Park project. CERTI is currently a reference in Brazil and abroad because of its development in innovative projects involving solutions in digital convergence, development of bank automation terminals and terminals for public access to the internet and regional development projects like the Alfa Technology Park (Florianopolis), Incubator of Tech-based Companies (CELTA), Sustainable Development Plan of the Industrial Pole of Manaus among others. Some entities participate on the council of Trustees, such as CODES, PMF, Weg, Embraco, UFSC, MCT, FUNCITEC and FIESC. Today, the CERTI Foundation has its headquarters in Florianopolis, on the Federal University

of Santa Catarina campus and also has some branches in Manaus and Brasilia with yearly earnings of R\$ 11.7 millions and also has 120 workers.

- The Sapiientita Institute is a private law entity, constituted in the form of association, non-profit organization and its social object is the research and scientific and technological development in the area of experience economy and knowledge society. The Sapiientia Institute is one of the mentors and partner on Innovation in Science and Technology of the Sapiens Park. The Sapiientia works in the areas of development of Interactive Contents, interactive software applied in Educational Games, projects / development / implementation of interactive experiences and research converging sciences an multidisciplinary. The Sapiientia Institute is the mentor and projector of the Experientia and Scientia areas of the Sapiens Park.

2.2.3 Campinas Technology Park

Campinas Technology Park can be seen in the context of innovation-intensive environment models. It is a project done together with Campinas City Hall, through Ciatec, Unicamp and the state govern of Sao Paulo, on the Program "Sistema Paulista de Parques Tecnologicos" of the Development Secretary for the area called "Polo II de Alta Tecnologia d" Ciatec".

The total area of the Park is about 8 million square meters. Part of this area reaches 1.3 million square meters, already occupied by private and governmental enterprises. The Park holds technological research institutions - The National Laboratory of Luz Sincroton (LNLS), The Foundation Research and Development Center (CPqD) and around 30 national and multinational technology-based companies, predominantly from IT areas and communication (ITC). Around three thousand people work at the Park. However, the number of people that walks around everyday in the Park reaches five thousand people, among workers and business visitors.

The Softex, software incubator from Campinas, operates in the Park, together with the Observatorio Digital, core of studies of Softex Nacional, both integrating the Inovasoftware, an innovation center on software from Unicamp.

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2.2.3.1 Park management;

The manager entity of a park has a fundamental role in establishing the guidelines, planning process management, coordination, action evaluation follow-up, articulated with cooperation networks, local and regional, as well as national and international. Besides, she can guarantee the capacitation of entrepreneurs by means of hiring specialized consultancies, participation in events, products promotion, and trips to capture potential clients, etc. She should also watch and disseminate to entrepreneurs, opportunities to attract financial resources, reimbursable or not, including risk capital.

Ciatec is the righty manager of the Park of Campinas and it consolidates itself as actual manager. It was constituted by municipal decree in December 1985, and same way, in December 1991; it was transformed in municipal mixed capital company, keeping the municipal city hall of Campinas as major stockholder. Currently, it participates on the planning and execution of science and technology policy of the city, besides of holding an incubator program of technology-base companies, denominated Nucleus for Supporting the Development of Companies (Nade). It coordinates the implementation of companies and institutions of scientific and technological research on Polos de Alta Tecnologia I and II. The Polo II corresponds to the Technology Park of Campinas.

2.2.3.2 Park Profile

The profile initially defined for the Technology Park of Campinas and presented to the Sistema Paulista de Parques Tecnológicos, was to host ITC technology-based companies.

For such, they tried to answer to the question about whether there would be a new global cycle of economy development based in ICT that would justify this specialization. On the answer for such questions, it was verified, according to Schumpeter, that one of the characteristics of the capitalist system is the dynamics of the permanent revolution on the technical basis of economy. In addition, Freeman & Perez believe that these changes are distributed in time with the periodical emergence of new tecno-economical paradigms and define these changes of new paradigms as forceful, resulting in a combination of radical and incremental innovations, but together with organizational and managerial innovations, affecting all the economy.

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The ICTs apparently are part of the origin of a new global cycle of long-term economical expansion, consisting itself in a recent tecno-economic paradigm. They result in a technological revolution, where the development and generalization of micro-electronic and the software has been fundamental, enabling a new stage in economics, based on knowledge. The ICTs stimulate the constant automation, affect existing industry segments and, just by itself, create emerging industry segments, provoking thus change in the industry structure and introducing a broader social change with changes in the occupational structure and introduction of the information society.

Manuel Castells, in his book *The network society*, highlights singularly the importance of the ICTs for this last stage of actual globalization, affirming that a new global economy came up in the last quarter of the 20th Century, creating a new distinguished economy system and calling it informational and global, to identify its fundamental and differentiated characteristics and highlighting its interconnection. According to the author, it is informational because productivity and competitiveness of units or agents in this economy depend basically of its capacity in generating, processing and applying efficiently information based on knowledge. It is global because the main productive activities, such as consumption and circulation, just as its components are organized in global scale, directly or by means of network connections among economic agents. It is also informational and global because – under new historical conditions - productivity is generated and the competition happens in an interactive global network.

2.2.4 Recife Porto Digital

The governing entity of the technology pole is the Porto Digital Management Unit (NGPD), civil non-profit association, qualified as Social Organization (OS).

Created in December, 200, the NGPD has the purpose of structuring and promoting the self-sufficient management of a world-class business environment.

In this organization model the result of the interaction between the productive, governments and universities chain, which constitute the key segments of society involved in the process of innovation.

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2.2.4.1 Investments on Porto Digital

To enable the execution of structuring actions, the govern of the State of Pernambuco invested R\$ 33 millions, from which R\$ 14 million were being directly executed by the NGPD.

The rest of the resources are being used by the government organs such as Facepe (Foundation for Support to the Science and Technology of Pernambuco), AD-Diper (Agency for Development of Pernambuco) and Sectma (Secretary of Technology, Science and Natural Environment).

2.2.4.2 Laws and incentives

During its first stage, or its first two years of existence, the NGPD structured the tools, laws and incentives so that companies would come to Porto Digital.

There were works on restoring historical buildings, besides of the articulation in implementing and operating the investments funds in Human Capital (FCH) and Risk Capital (FCR).

On the second stage of action, the NGPD acts for the continuous development of the business environment, making technical cooperation agreements, technology transfer, fostering still the interaction among companies, and promoting in Brazil and abroad the image of the Local Productive Arrangement as an excellence island in the ICT area.

2.2.4.3 Administration Council

People that work on the productive segment, governments, universities and other representations of society has deliberate and inspection function about the objectives, goals, guidelines to make Porto Digital work. The composition of the council is formed by 37% of governmental representatives; 21% of the productive sector; 11% of universities; 16% or non-governmental organizations and 16% of representatives of other sectors of society.

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2.2.4.4 Management Model of Porto Digital

To complete the requirements of management, a private non-profit organization was created to have the role of manager of the Porto Digital, the NGPD. This social organization has the purpose of structuring and managing a business environment that creates and consolidates world-class information technology enterprises through interacting and cooperating with universities, companies, organizations and governments in the State of Pernambuco. This organization has a fundamental role in the success of Porto Digital. Figlioli (2007) states that “because it is a complex enterprise, a tech park requires an organization to coordinate their actors, to run the technology management program, by means of interaction mechanism among companies, universities and investigation institutes and managing their constituent elements”.

2.2.4.5 Importance of Management as Catalyst Element

Not only the technology changes influence the standards of development. The institutional aspect has an indispensable role on development politics. According to Nelson (2002), “the technology change, the companies and institutions together define specific standards of development”. An innovation system is a complex network in constant evolution, in which organizations and companies, located in a territory develop their roles, being guided, ruled, measured and promoted by an institutional framework of formal and informal relationships. To achieve the goal of local sustainable development through generating and attracting companies, the cluster should be well managed and in constant innovation.

Due to globalization, the standard and characteristic of the dynamic process of the economy were influenced by the institutional structure that supports it. Likewise it happened with the institutions, which also strongly influence the way new technologies are accepted and absorbed by the economic system. This point is clearly evidenced in studies such as Christopher Freeman’s and more recently, by the concept of national system (or local) of innovation from Lundvall. Nelson pinpoints that the relevance of the institutional variable has not still been totally perceived: “However, most part of the evolutionist theory of the economic growth, such as the neoclassic theory of growth, still has not

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encompassed the complex institutional structures that are characteristic of modern economies" (NELSON, 2002).

The institutional component is a fundamental element for the success of the strategy of the Innovation Local System. According to Lundvall (2005), the "National System of Innovation (SNIs) is an approach more often used in the last decade to understand the complex relationships that compose the innovation process. The analysis of the SNIs in different countries describes as inter-relationships the participation of institutions and organizations and their networks.

Managing the cluster should be based in a coherent model and conducted by an organizational agent able to impartially and transparently articulate and mediate the SLI organizations. Besides, there should have an institutional frame that regulates the activities and enables an efficient and effective organization management.

The management of complex systems involves the follow-up and analysis of activities in each individual component, in the information flows and relations between companies and organizations.

According to Rowe (*apud* FIGLIOLI, 2007), the administrative function of a technology park involves:

- Raising funds to develop the park;
- Promoting the park, identifying and attracting companies;
Provide the important connections between university and resident companies;
- Assisting the startups and emerging companies;
- Managing the built-up environment;
- Planning the strategy for the park and taking decisions about investments.

Figlioli (2007) presents 5 (five) organization models to manage technology parks:

- i. University-based;
- ii. Led by the central government;
- iii. Led by the local government;
- iv. Managed by means of partnerships or
- v. Non-profit organizations.

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Gargione, Lourenção & Plonski (2006) present characteristics of private management of a park, in which they understand as being of fundamental importance in managing public parks:

- Governing mechanisms with decision autonomy;
- Professional management model with the use of quality indexes on the services of the park.

The role of managing a innovation local system should be attributed to an organization with certain characteristics that make it possible to mediate conflicts and perform a systemic view of the cluster. Therefore, private companies or institutions should not do the innovation management. The process of planning a SLI should be a collective process, involving all organizational components and companies. Thus, it has to be an organization, supported by an adequate institutional frame to coordinate the planning process and execution of its actions. This institution is found in the interaction among three main sectors of society involved in the innovation process: productive sector, Government and Academia (ETZKOWITZ & LEYDESDORFF, 2000).

According to Figlioli (2007), the legal form adopted by the park manager influences and limits its mission and affects its administrative behavior. Bigliardi (*apud* FIGLIOLI) provides an example of how a park managed by an anonymous society will be evaluated in most cases only by financial indexes. In Brazil, the most dynamic model and which foresee the administrative autonomy of the park is the creation of non-profit private foundation.

Lemos & Diniz (*apud* FIGLIOLI, 2007) believe that the “Social Organization” (OS) “is presented as good solution in the attempt of assuring certain administrative autonomy in the public sector, without losing reference of a private company with public interest”.

The “Social Organization” legal form refers to a private company provider of private service of public interest. This definition indicates clearly the strategic role of social organizations in making dynamic and efficient the actions of public interest, through an exclusively private management, without loss of control and transparency by the public authorities. Undoubtedly, in this new type of partnership, the social control on these services is reinforced through its administrative council. The objective on creating the Social Organizations was to create a tool that enables the transferring of non-exclusive execution activities by the State to the private organizations.

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2.2.4.6 Porto Digital Management Unit

The Porto Digital Management Unit (NGPD) is in a legal framework that enables the implementation of public policies to promote the structuration and evolution of Porto Digital, also through running public resources. These institutional imperatives are structured by formal legal regimes and by informal relationships in the cluster. The capacity of implementing privately public policies requires a sophisticated institutional framework, which was determined by specific legislation, which defines:

- A form of open private organization to receive public funds to execute non-exclusive public services in the state;
- Legal milestone that regulates the relationship between the State and this organization by means of management contract mechanisms.

This institutional framework is found on the following legal forms:

- The Social Organizations: In the State of Pernambuco, this institutional framework is defined by Law n. 11,743 from January 20, 2000 and regulated by the Decree n. 23,046, from February 19, 2001.
- Management Contract is a tool to regulate the relationships between the government and social organizations. In the State of Pernambuco, this is defined as in the Law n. 11,292 from December 22, 1995 and regulated by the Decree n. 23,445, from February 02, 2001.

The main objective of the NGPD is to raise the positive environmental factors (externalities) to improve the innovation capacity and competitiveness among companies and the cluster as a whole. Such externalities can be direct or indirect, in which the Management Unit will have an influence on it. The direct externalities include: formation of human capital, financing innovative companies, company certification, telecom infrastructure, information, brand; indirect externalities include: social security, public transportation, shopping malls, urban equipment, streets and lanes, sewage. To make it, the main functions of the NGPD are:

- Generate original ideas;
- Formulate innovative projects from original ideas;

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- Articulate operating agents so that the projects can be implemented – including sponsors, govern, companies, universities;
- Attracting innovative IT-based companies, generating qualified jobs and income.

2.2.5 SERGIPETEC

The management of the new Sergipe Technology Park and its Attachment I, it is SERGIPETEC duty, social organization responsible for the implementation and feasibility of the new park and its attachment, as defined by the Management Contract 01/2009, completed by the OS and the State Secretary of Economic Development, Science and Technology – SEDETEC, with the intervenience of the State Secretary of Treasury – SEFAZ, State Secretary of Infrastructure – SEINFRA, State Secretary of Administration - SEAD, and the Industrial Company of Mineral Resources of Sergipe - CODISE.

Currently with 92 workers (20 in the administrative and management area), the OS SERGIPETEC is divided into 3 boards, being the responsibility of the board of technology to conduct business/projects in related areas to the park and its Attachment I.

The organization of the administration is configured according to Figure 2.3.

Besides the responsibility for executing the complementary works of Attachment I of the Sergipe Technology Park, it is also duty of the SERGIPETEC to:

- Approve projects of companies that will be installed in the Attachment I, obeying the criteria established in its Master Plan;
- Select enterprises through the analysis of technic-economic feasibility study;
- Structure and execute the Marketing Plan;
- Execute and manage the common service to the park: cleaning, maintenance, landscaping and security.

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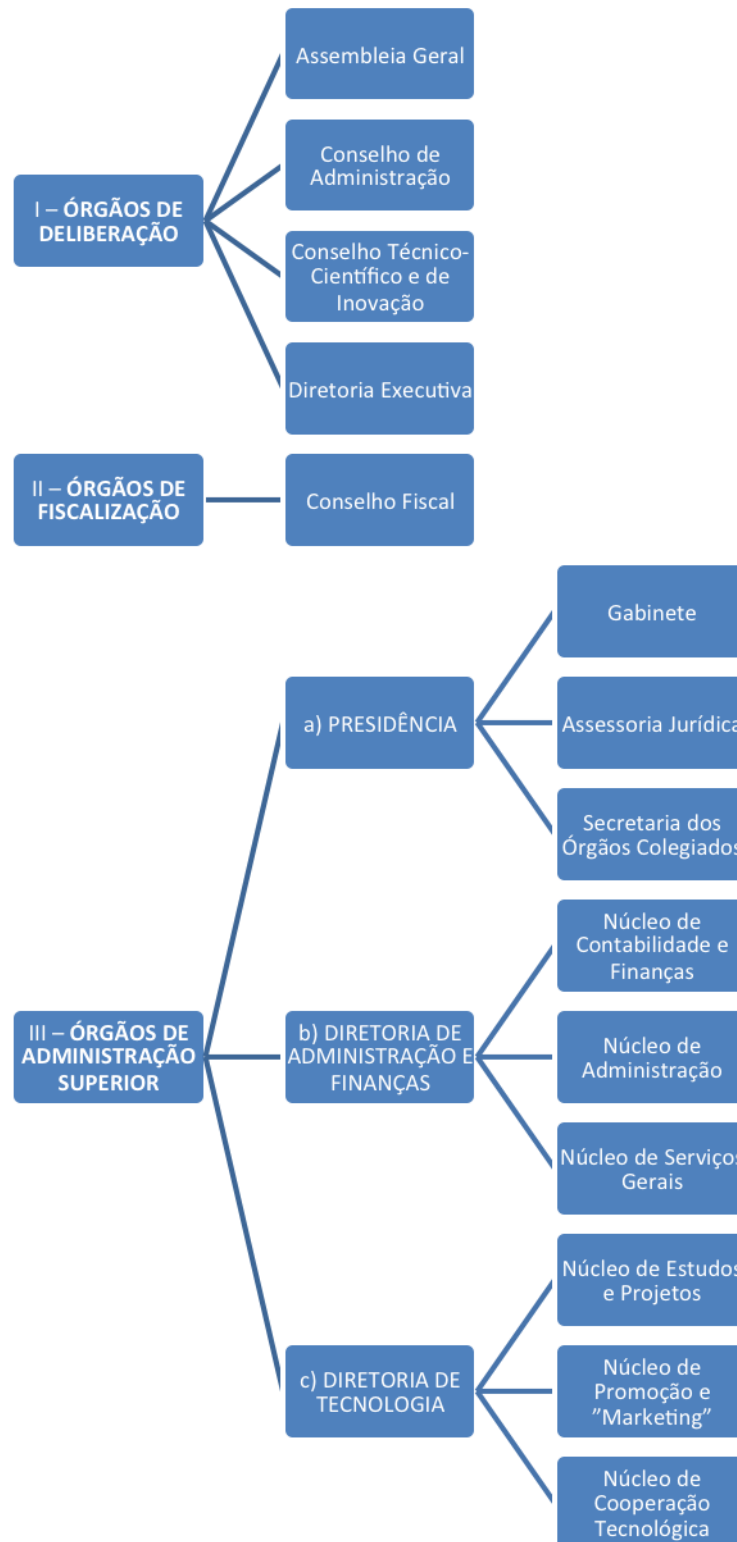


Figure 2.3 - Administrative Organization of the SERGIPETEC

2.2.6 Andaluzia Technology Park

The Andaluzia Technology Park was originally conceived to be a dynamic sector of the Andaluzia technology unit. This dynamic is understood in a qualitative sense of the support functions, such as the generation of scientific and technological knowledge, implementation of industrial activities and high-quality service, enabling the application and experimenting new technologies and, finally, the establishment of technology structures and training of services oriented to companies and institutions.

All of that defines the Andaluzia Technology Park as a science, culture and leisure place, which produces synergy and makes easy to the different innovation actors to have a close relationship.

The idealizers and promoters of the Andaluzia Technology Park are: the Board of Andaluzia through the Agency for Innovation and Development (IDEA) and the Public Land Company of Andaluzia (EPSA) together with the City Hall of Malaga. From 2008, the Unicaja bank became also shareholder of the Andaluzia Technology Park S.A.

The manager entity of the PTA is the Andaluzia Technology Park, AS and its organizational form of management is presented in Figure 2.4

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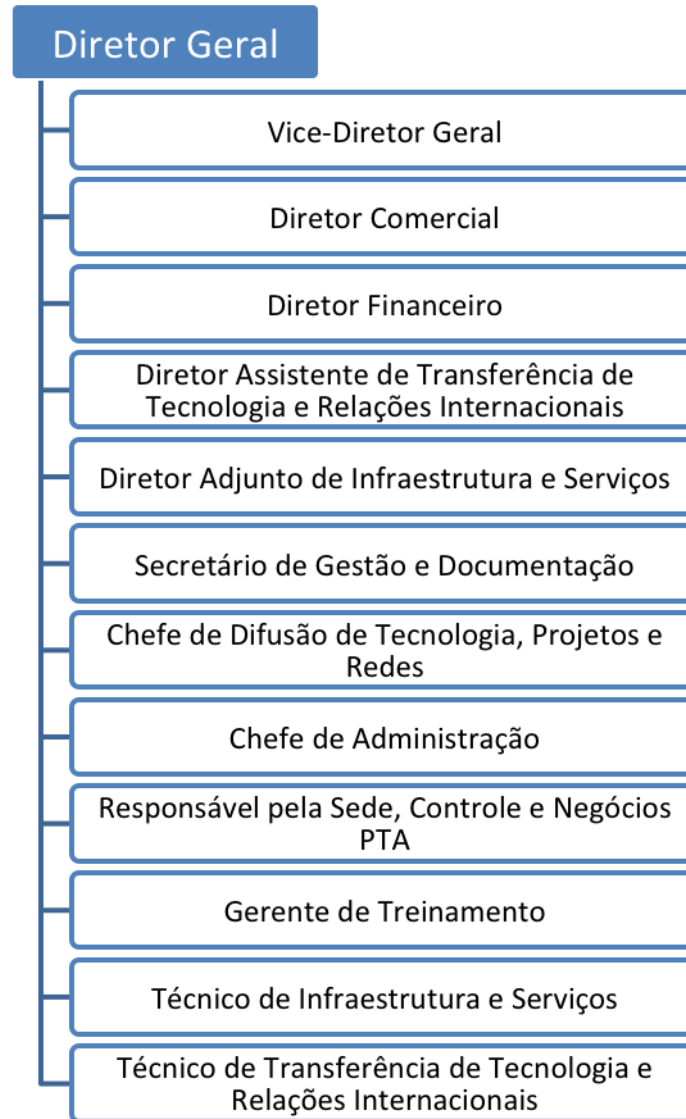


Figure 2.4 - Organizational Structure of the Andalusia Technology Park

3 GROUNDWORK OF AN ORGANIZATIONAL STRUCTURE FOR THE PTCD

3.1 ANALYSIS OF PARTNERSHIP FORMS FOR THE PTCD MANAGEMENT

To better understand a method of managing for the PTCD, a study about what options were available to TERRACAP and to the Federal District Government for a better management of Lot 1 of the PTCD.

Such study, which was presented when delivered the Product 3, in its main conclusions propose that the best option for Lot 1 of the PTCD would be the creation of a SPE – Special Entity Organization – in the DBFO model – Design Build Finance and Operate, according to what was explicitly typed:

*Also, because of the information obtained by documents and in meetings about the issue, it was observed that the type of PPP that seems to be most adequate is the one called **Design Build Finance and Operate (DBFO)**, in which the private partner finance, elaborates the Project, promotes building and operates one or more facilities in exchange for receiving the revenue generated by the services explored by means of them during a determined period of time.*

In this type of PPP, the public partner lead the role of inspecting the suitability of building and operating the facilities which keep as part of its property. However, there is no impediment to enable the project which has a considerations by the Public Power in a more directly way and which stimulates even more the interest in partners, just like, for example, reserving (in a calculated, temporarily and limited) its crediting rights over the social participation to which they are entitled when available the works and beginning of the services reserved, as permitted on the item II of the art. 6 of the Law n. 11,079/2004, among other possible means.

Thus, having in mind the study it was formulated a proposal of Organizational Structure, which account the interests of TERRACAP and the manager company, where

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TERRACAP would have a more inspection role and the Manager Company would have a business management of lot 1 of PTCD.

3.2 DEFINING A MACRO ORGANIZATIONAL STRUCTURE TO MANAGING THE PTCD

Before all models presented in the last sections, the examples of national and international Parks, which works as a SPE, or Foundation or OSCIP (Public Interest Civil Society Organization), we present a proposal of organizational structure of the SPE to be created as manager company of lot 1 of the Capital Digital Technology Park, illustrated in Figure 3.1 and described in the sequence.

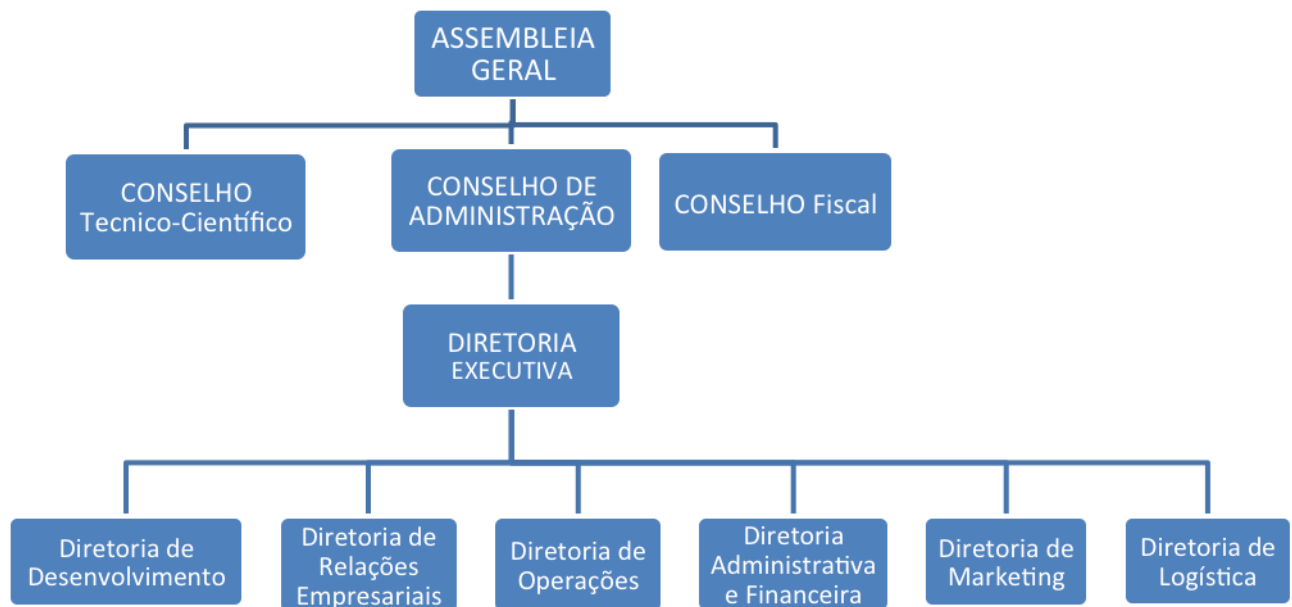


Figure 3.1 - Proposal for the Organizational Structure of the SPE

In the proposed structure, the following roles and main responsibilities are attributed to each unity:

- **General Meeting** – Will be composed of the Company Shareholder, being able to discuss, vote or deliberate (through the meeting) about any topic of social interest, including the most detailed administrative problems. The Administration Council or other legal forms will summon the general meetings,

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and they will meet ordinarily once a year, in the first four months after the end of social exercise and, extraordinarily, everytime it would be of the company's interest.

- **Administration Council** – It is the deliberative and Inspection organization, consisting of 5 members, all shareholders, living in Brazil or abroad, elected in General Meeting, according to TERRACAP's indication, as well as the Manager Company's; and the period of management of the Council will be 3 years, admitting reelection. The Administration Council has competency to any subject of social interest, except those in privacy of the general meeting. Its role is to accelerate the process of business organization.

The Administration Council can constitute 4 Consultative Councils to assist them in the following areas of strategic interest of the Company: Political-Institutional Consultative Council; Social and Environment Consultative Council; Business Consultative Council.

The Consultative Councils area composed of unpaid members, which will be asked to manifest themselves specifically by request of the Administration Council or the Chief Executive Office, who will be authorized by the Administration Council, being his or her manifestations always in terms of opinion.

- **Technical-Scientific Council** – Should be an organization to advise the Administration Council so to safeguard the technical and scientific interests of the PTC D Lot 1 in relation to the admission of companies, so that the referred lot maintains itself in the specificities that characterize the definition of a Technology Park.

Members of the academic society of the Federal District, all properly linked to the public and private Universities should compose it.

Its composition will be determined by the relevance of services provided by the Universities and the number of members defined by the Administration Council.

Among other functions, one of the most important ones should be to elaborate the Science, Technology and Innovation project of the PTC D Lot 1, in which the areas of initial action should be part of, as well as the available services (laboratories, researchers advisory, research pilot-project, royalties

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systems, among others) and the indication of a legal instrument that assures the integrity of the Park.

- **Fiscal Council** – It is the organization that audits the Company, composed of 3 effective members and equal number of alternate members, who have the function of analyzing the accounts of the administrators and voting the financial demonstrations from the SPE to be created.
- **Executive Board** – It is the executive organization of the Company, composed of 7 members, who are supposed to manage the company and, externally, manifest the will of legal entity, in the generality of acts and business. The Board consists of an Executive Director, a Development Director, a Business Relations Director, a Operation Director, a Finance Administrative Director, a Logistics Director and a Marketing Director, shareholders or not, all elected and dismissible at any time by the Administration Council, by the period of management of the Board will be 3 years, admitting reelection. The Directors will not be able to use social denomination in business or operations strange to the social objectives. The Board has competency to generate the business of the Society, running the activities concerning themselves to complete the general orientations and strategies determined by the Administration Council and Social Statute; Accounting the deliberations of the General Meeting and the Administration Council, meeting them within legality among other attributions.

Having that in mind, as an example - since the Administration Council that will define the attributions of the Executive Board and its partitioning - Figure 3.2 presents a suggestion of constitution of functions of the Executive Board and others in order to have an structured organization and its attributions.

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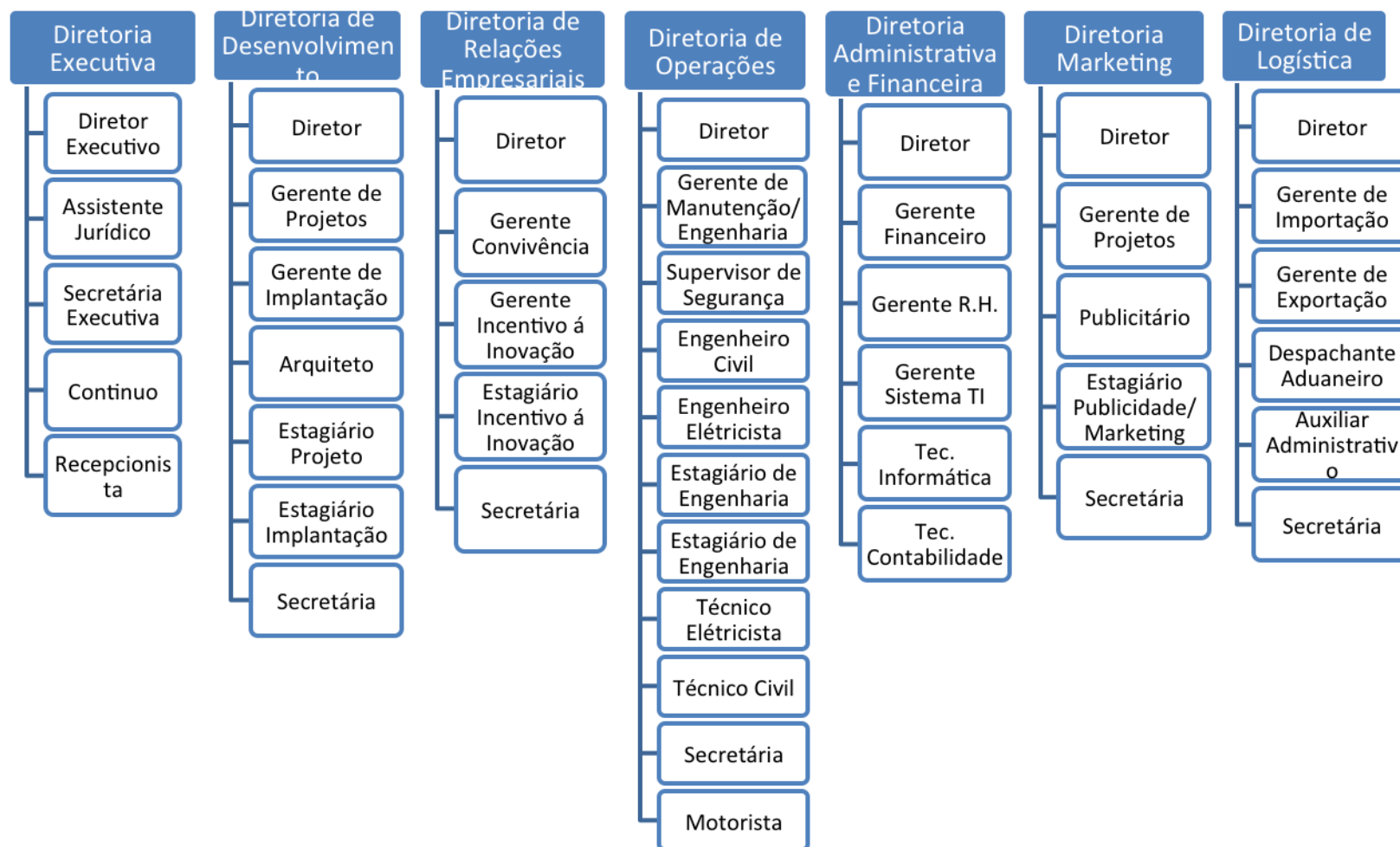


Figure 3.2 - Proposal of constituting functions for the Manager Company Boards

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4 CURRICULUM AND EXPERIENCE OF THE PEOPLE INVOLVED

The Technical-Executive Team of the SPE – Manager Company will be endowed with professionals they will select, composed by engineers, architects, IT consultants and other professionals needed, acting on their respective specialties, properly accredited to act with the companies of the PTCD Lot 1, with authority to run every general orientation action, as well as controlling and inspection on implementation of contracts of PUBLIC-PRIVATE PARTNERSHIP and PROPERTY RENTAL, comprehending the electromechanical facilities, the special facilities of logics, telecom, security etc., as well as other services and works needed to make the PTCD COMPLEX work, such as building maintenance, surveillance, etc.

The composition of the Technical Body of the SPE can be freely altered, according to the stages of implementation of the contracts. The Technical Body of the SPE can be divided into teams, and will have as acting limits to strictly follow the contract's technical conditions. The Technical Body of the SPE will act since the signature of the Acceptance Term of Construction until the end of the term in the PUBLIC-PRIVATE PARTNERSHIP CONTRACTS and shall comply with the functions and responsibilities described in the next sections.

4.1 PROFILE AND RESPONSIBILITY OF THE EXECUTIVE BOARD FUNCTIONS

The Executive Board must coordinate, execute and control the general administrations of the company and to do that their participants shall perform the roles shown in Table 4.1. below:

Table 4.1 - Functions Detailing

BOARDS	FUNCTION
EXECUTIVE BOARD	<p>It is the Executive Board function to:</p> <ul style="list-style-type: none"> I – implement the management policies to the company emanated from the Administration council; II – together with its directors, elaborate the strategic planning of the company; III – administrate the company, in partnership with its directors, so that the same achieves its final objectives.

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BOARDS	FUNCTION
	<p>It is the Legal Board function to:</p> <ul style="list-style-type: none"> I – advise the Executive Board in legal subjects; II – assist and advise the organic units of the Association about legal questions that involve the interest of superior administration; and III – Propose, argue, recourse and monitor the progress of judicial and extra-judicial documents, in the form of the Law n. 8,906/94. <p>It is the Secretary of Collective Bodies function to:</p> <ul style="list-style-type: none"> I – perform the activities of administrative support to the General Meeting, to the Administration Council, to the Fiscal Council, to the Science and Technical Council and I – Prepare the acts emanated from the General Meeting, to the Administration Council, to the Fiscal Council, to the Science and Technical Council and
<p>DEVELOPMENT BOARD</p>	<p>It is the Development Board function to:</p> <ul style="list-style-type: none"> I – Coordinate, supervise and elaborate basic studies, of pre-availability, viability, basic and executive projects of enterprises related to the development and dissemination of several kinds of science and technology; II – elaborate proposals to capture resources aiming to support the implementation of companies, with close articulation with the Administration and Finance Board; III – develop, coordinate and control actions complying with the environmental legislation and to promote the execution of environmental programs; IV – follow, evaluate and control the implementation of plans, programs, projects and SPE activities – Manager Companies – from the PTCD Lot 1.
<p>BUSINESS RELATIONS BOARD</p>	<p>It is the Business Relations Board function to:</p> <ul style="list-style-type: none"> I – Prospect companies with profile, within the premises of a Technology Park, to become residents in the Lot 1 area of the PTCD. II – carry out national and international “road shows”, so to attract the interest of companies, counting with a portfolio of incentives, subsidies legislative projects, derived from the Federal District Government; III – carry out the prospection of innovation projects and provide support to the resident companies (operational support to the companies, besides of strategy, marketing and technology consultancy). Management support services and specialized technical services. IV – identify in the public and private sector actors (agencies, institutions, companies, university and etc.) interested in investing in the innovative park. IV – program, coordinate and control the implementation of companies in the SPE grounds – Manager Company – from the PTCD Lot 1.

BOARDS	FUNCTION		
	V – plan, implement and maintain the Technology and Information system Infrastructure.		
<p>OPERATION</p> <p>BOARD</p>	<p>It is the Operation Board function to:</p> <p>I – develop activities that assure the installation of companies selected to the park;</p> <p>II – supervise and manage the building projects in Lot 1 of the park;</p> <p>III – develop, implement and maintain the Security Service and Surveillance of the external areas and common areas of the Park, 24/7, including supplying equipment and staff as necessary.</p> <p>IV – Implement and maintain the Service of building and urban maintenance, which should consider maintenance, cleaning and conservation of public lanes, buildings and common use facilities.</p> <p>V – maintenance of internal systems of the Park to provide electric power, water/sewage, and communication, in what is not responsibility of the agencies, in the common areas of the park, as well as the public lighting system of the park.</p> <p>VI – maintenance of systems of electric power facilities, drinking water and sewage, lifts, air-conditioning, and facilities against fire on the building of the PTC D Lot 1;</p> <p>VII – project, implement and maintain the green areas, lawn and gardens in the areas of the park.</p> <p>VIII – inspect and carry out the daily house garbage collecting, to be done by outsourced company, through gathering of appropriate containers, following the models specified by the SPE administration.</p> <p>IX – implement and manage the transit of vehicles in the area of Lot 1 in the PTC D, encompassing the following aspects:</p> <ul style="list-style-type: none"> a) Car traffic control at the park b) Parking lots management at the park c) Installation, maintenance and management of traffic horizontal and vertical signs. d) Issue licenses to dig the lanes of the park e) etc. <p>X – planning and managing operations related to environmental protection in the park;</p> <ul style="list-style-type: none"> a) Prevention and Control of Water Pollution, Air Pollution, noise and vibration, soil pollution, pollution and underground water in the park; b) Proposals of revising for prevention and control of water and stationary sources pollution, as well as wastes elimination; c) Operate, maintain and supervise places that treats the wastes and sewage systems in the park; d) Carrying out training programs about environmental protection; 		
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BOARDS	FUNCTION
	<p>e) Promoting and advising recycling wastes and reuse by companies occupying spaces;</p> <p>f) Advise resident companies about conserving water and electricity safety;</p> <p>g) etc.;</p>
<p>ADMINISTRATION</p> <p>.</p> <p>AND</p> <p>FINANCE</p> <p>BOARD</p>	<p>The Administration and Finance Board, by means of its Units, is responsible to:</p> <p>The Accounting and Finance Unit responsibilities are to:</p> <p>I – coordinate, supervise and execute the activities of classifying, registering and calculating accounts of the acts and administrative facts; and</p> <p>II – manage the finances of the SPE – Manager Company of the PTCD Lot 1.</p> <p>The Administration Unit is responsible to:</p> <p>I – develop activities related to selecting and recruiting staff;</p> <p>II – carry out training and development activity of the jobs and salaries plan;</p> <p>III – register and manage the employees’ payment (salaries, supplementary allowance, day rate, etc.);</p> <p>IV – study and propose norms, routines and administrative procedures;</p> <p>V – elaborate, execute and follow the budget program of the Manager Company of the PTCD lot 1.</p> <p>It is the General Services Unit responsibilities to:</p> <p>I – coordinate, supervise and execute the administration of supplies and assets;</p> <p>II – coordinate, supervise and execute the entrance building (lobby) services, protocol, surveillance, cleaning and conserving the administration facilities of the Lot 1 in the PTCD;</p> <p>III – carry out the procedures related to acquiring goods and services needed for the full operation of the PTCD's Lot 1;</p> <p>IV – reception and issuing of official documents.</p>
<p>MARKETING</p> <p>.</p> <p>BOARD</p>	<p>It is the Marketing Board responsibility to:</p> <p>I – stimulate and advise the private initiative and promote the organization of tech-based companies;</p> <p>II – develop a strategy of institutional marketing to attract companies and develop partnerships with actors of the Innovation System of the Federal District, Brazil and abroad;</p> <p>III – elaborate marketing projects addressed to the production of events, promoting and participating of meetings, seminars, exhibits, fairs and workshops, aiming to announce the potentialities and opportunities of investments and;</p>

BOARDS	FUNCTION		
	<p>IV – propose, articulate and foster partnerships with public and private institutions, aiming to sustainably develop the SPE – Manager Company – of the PTCD’s Lot 1;</p> <p>V – schedule interviews with board of directors and journalists accredited by communication bodies;</p> <p>VI – elaborate releases to any kind of media, according to a routine of surveying the subject, writing, superior approval and forwarding to specialized editors;</p> <p>VII – implement promotion policy of the SPE – Manager Company – of the PTCD’s Lot 1 and the PTCD brand;</p> <p>VIII – undertake internal communication actions of endomarketing and administrative information;</p> <p>II – and maintain the SPE’s webpage – Manager Company of the PTCD Lot 1.</p>		
<p>LOGISTICS</p> <p>BOARD</p>	<p>It is the Logistics Board function to:</p> <p>Properly manage the UDA – Customs Clearance Unit that should be implemented in the PTCD Lot 1.</p> <p>To better perform this function, the following description explains some of the definitions and necessities to implement and operationalize a UDA:</p> <p>UDAs - Customs Clearance Unit are customs enclosure places of public use, situated in a secondary zone, in which operations of movement, storage and customs clearance of goods and baggage are performed under customs control.</p> <p>The operations of movement and storage of goods under customs control, as well as the connected services provision, in Customs Clearance Unit, are subject to the regime of concession or permission.</p> <p>The execution of operations and connected services provision are taken effect in Customs Clearance Unit installed in real estate belonging to the Union, case in which it will be adopted concession regime preceded of the execution of the public construction.</p> <p>A Customs Clearance Unit is installed, preferably adjacent to the productive and consumer regions.</p> <p>In the Customs Clearance Unit all customs services are also executed by the Federal Revenue Office, including the procedures of customs clearance and exporting (monitoring and customs clearance), allowing, thus the interiorization of such services in this country.</p> <p>Providing customs clearance services in Customs Clearance Unit next to the residence of the economic agents involved provides a great simplification of procedures for the contributor.</p>		
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BOARDS	FUNCTION
	<p>In the Customs Clearance Unit, the companies that need foreign trade services, should find all proper services gathered in one place only, with the constant presence of the Brazilian Federal Revenue; ANVISA (National Health Surveillance Agency) and the Ministry of Health and the Ministry of Agriculture, Livestock and Supply.</p> <p>Operations and Technology Structure</p> <p>To provide integrated logistics services, and to link continuous improvement with innovation is the quality policy of the Customs Clearance Unit. To assure quality to the services, investments shall be done in acquiring modern equipment, besides all work stages being carefully controlled by a highly qualified team in logistics operations. The result should be the guarantee of quality and development of integrated and customized solutions for the storing and moving of different goods.</p> <p>Customs Clearance Unit should operate with modern equipment, interconnected by computerized systems, which guarantee greater productivity and less operational costs.</p> <p>In searching to optimize the logistics of its clients, the Customs Clearance Unit shall offer a modern structure of e-service, option by which, the client or the customs broker obtain information on the internet about the goods quick and easy.</p> <p>Legislation</p> <p>The legal norms and regulation that account how the dry ports operate are: Laws n. 8,987, from February 13 of 1995; and n. 9.074, from July 7, 2995; Decrees n. 1,910, from May 21, 2996; n. 2,168, from February 28, 1997; n. 2763, August 31, 1998; and n. 4543 from December 26, 2002, with the alterations on Decree n. 4765 from June 24, 2003; and SRF Normative Instruction n. 55, from May 23, 2000; n. 109, from December 8, 200; n. 70 from August 24, 2001; n. 212 from October 7, 2002; and n. 241 from November 6, 2002.</p>

4.2 PARAMETERS TO HIRING

The professionals to be hired for the management of the SPE - Manager Company - of the PTCD's Lot 1, besides of having an education quality suitable for the jobs, they should be able to perform the attributions in Table 4.2.

Table 4.2 - Attribution detailing

JOBS	ATTRIBUTIONS
EXECUTIVE DIRECTOR	It is the Executive Director function to:

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JOBS	ATTRIBUTIONS
	<p>I – perform the supervision of SPE’s activities – Manager Company of the PTCD Lot 1.</p> <p>II – comply with and make it be complied with the rules in force;</p> <p>III – designate the Director that will be the substitute in his or her absences or occasional impediments;</p> <p>IV – make a firm acts that consubstantiate the resolutions of the Executive Board;</p> <p>V – coordinate the politics and business contacts of the Entity.</p>
DIRECTORS	<p>The Directors responsibilities are:</p> <p>I – comply with and make comply with the superior acts emanated from the General Meeting, the Administration Council, the Fiscal Council, the Executive Board and Presidency;</p> <p>II – participate of the Executive Board meetings, with voting right;</p> <p>III – propose and establish measures addressed to eliminate the occasional distortions verified when following the plans, programs developed, projects and activities under his or her responsibility;</p> <p>IV – carry out the budget approved for the respective Board;</p> <p>V – forward Proposition to the Executive Board about the subjects of his or her attribution;</p> <p>VI – indicate to the Executive-Director the names to fulfill the vacancies projected for the organic units that are related as well as their substitutes.</p> <p>VII – delegate specific competency in subjects for possible delegation, aiming to solve issues of his or her regulatory sphere of influence.</p> <p>VIII – authorize the absence of employees, within national territory, on the organic units which they make part, when in service; and</p> <p>IX – approving the annual vacation shifts and other absences of his or her subordinates.</p>
UNIT MANAGERS	<p>The Unit Managers responsibilities are to:</p> <p>I – advise and control the execution of activities related to his or her organic unities;</p> <p>II – comply with and enforcing these principles with the work programs approved for his or her organizational units;</p> <p>III – provide to the Director the necessary elements to formulate the budget proposals;</p> <p>IV – submitting to approval of the Director the work plans related to his or her organic unit;</p> <p>V – communicate to the Director the distortions verified in the development of</p>

JOBS	ATTRIBUTIONS
	<p>the work plans under his or her responsibility, adopting, in his or her decision sphere, the providences necessary to correcting the deviations;</p> <p>Vi – elaborate proposals of normative acts related to his or her area of operation;</p> <p>VII – provide information to consolidate the staff training programs that he or she is subordinate;</p> <p>VIII – elaborate the annual vacation shift of the subordinate staff;</p> <p>IX – present to the Director report of activities developed by the respective unit.</p>
ADVISORS	<p>The Advisors responsibility is to:</p> <p>I – advise the holders of rights in the solution of specific problems which, by essence and nature, requires and demand multidisciplinary research and technical studies.</p> <p>II – treat of any issues to which they were attributed by the holders of rights;</p> <p>III – advise the holders of rights in performing the functions of planning, coordinating, advising, directing and controlling activities developed in the organic units under its subordination; and</p> <p>IV – provide support to examine – for decision objectives – technical and management questions and issues.</p>

5 FOLLOW-UP AND EVALUATION MECHANISMS

The follow-up and evaluation on the CONCESSION kind of management, encompassing all stages of pre-operation, executive management and maintenance by the MANAGER COMPANY, during all CONTRACT period, the Grantor will perform, so that to maintain the purpose of the project in all of its segments, be them scientific, economic, financial, and specially so that the same reaches the objective of leveraging the economic development of the Federal District and surrounding municipalities.

5.1 FOLLOW-UP

The MANAGER COMPANY shall give the option to the Granter, or any other entity by it indicated, the free access at anytime to areas, facilities and places related to the CONCESSION, 'to the books and documents related to the MANAGER COMPANY, as well as books, records and documents related to activities and services addressed by the CONCESSION, including statistics and administrative or accounting records, and will provide about the latter, within due time, any clarifications formally required.

The Granter will be able to demand from the Manager Company, at any time and any circumstance, technical, operational, economical, financial and accounting information, as well as measuring and accountability.

The determinations that the Granter might do, within the sphere of its powers and auditing, should be immediately accepted by the MANAGER COMPANY with no harm of the latter to be able to present suitable appeal, in the terms of this CONTRACT.

When auditing, the Granter can:

- Follow the progress of construction and provision of activities and services, as well as conserving reversible goods;
- Proceeding the inspections to verify suitability of facilities and equipment, determining the necessary corrections, repairs, removals and substitutions, to the expenses of the MANAGER COMPANY;
- Enforcing sanctions and penalties described in this CONTRACT.

If the MANAGER COMPANY do not accept the determinations of the Granter, the latter can take, directly or by means of a third party, the necessary arrangements to correct

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the situation, running the respective costs on the account of the MANAGER COMPANY, with no harm in the enforcement of the sanctions and pertinent penalties.

5.1.1 Concession Execution Management

As observed in the terms of the contract and its attachments, the planning and material execution of services and the activities related to CONCESSION are attributions of the MANAGER COMPANY, with no harm of the permanent orientation of the Granter, to greater efficiency and improvement on the quality of the services and activities, in the terms presented in the contract and its attachments.

In exploring the CONCESSION, the MANAGER COMPANY will be free to choose the direction of its business, investments, staff, material and technology, observed the prescriptions of the contract, the specific legislation, the regulatory norms, the instructions and determinations of the Granter.

Besides the punctual improvements in running the construction, services and activities, the MANAGER COMPANY can present the Granter the proposal of improvement of monitoring mechanisms and supervision of the CONCESSION object.

In addition, other mechanisms to follow the management of the Executive Board should follow the standards defined bellow, so to meet the objectives of the project and should be formatted according to the implementation of the services in product 5.1:

- Managing the process of improvement and performance according to the objectives and goals defined to support and nurture Lot 1 in the PTCD;
- A centralized structure to support management allows: creating common and consistent standards on the boards, creating and maintaining a performance index system (transparency); administrative efficiency by means of managerial support to several managers;
- Sharing good experiences and practices. In addition, the capacity of technicians in this area could be used in the way of consultancies and training on project management to all companies.

In addition to the service infrastructure idealized for the parks (management office, physical and administrative facilities of an EBT and service lab incubator), there should be

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proposed the creation of mechanisms that assist sharing resources of the Innovation System of the Federal District and region.

5.2 EVALUATION

The evaluation, in the form of management that will be developed by the Executive Board of the SPE in Lot 1 of the Capital Digital Technology Park, by its superior bodies should be done using several criteria and forms, about the most diverse aspects of management.

It can use since hiring a company to perform auditing external to the management or other method would be requesting the Executive Board internal reports of self-assessment.

In the case of using the latter, the reports could address the aspects cited below, which properly answered can give the Superior Administration a broad view of the how the management of the Executive Board has been developing their tasks.

Thus, we give some examples by relating some aspects to be answered when elaborating the Management Assessment Reports.

5.2.1 Criteria and Assessment Items

5.2.1.1 Leadership

This criterion examines the organization governability, including aspects related to transparency, equity, accountability and corporate responsibility. It also examines how leadership is performed, including themes such as cultural change and implementation of the management system of the organization. The Criterion approaches the performance analysis of the organization focusing the comparison with the performance of other organizations and the strategies success assessment.

- Governance and Governability

This item examines the implementation of managerial process which has as purpose to generate transparency and improve the trusting level among all stakeholders

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and which generate impact in the value, finance and budget, social and environmental sustainabilities, and the organization governability.

- a) As the main decisions are taken, communicated and implemented by the High Administration, assuring the involvement of all stakeholders, transparency and governability, highlighting the following factors:
 - i. How the executives, members of councils and committees are chosen, as applicable.
 - ii. The methods used to register and monitor the High Administration acts.
 - b) How organizational values and principles are established and updated to creating value to all stakeholders and to sustainable development, and how these values and organizational principles are presented.
 - c) How the most significant organizational risks are identified, classified, analyzed and treated in terms of what can affect the governability and the capacity of the organization to reach its strategic objective and completing its mission, citing the following parameters:
 - i. The main organizational risks taken by the High Administration before the inherent uncertainties to the mission and strategies.
 - ii. The main performance indexes used in assessing the organizational risks.
 - d) In what way the Executive Board accounts for its acts and results completed to who elected it or designated and to the controlling bodies.
- Leadership System:

This item examines the implementation of managerial process, which objective is to disseminate the principles, values and guidelines of the organization; develop leadership skills; move workforce and obtain the support of the other stakeholder for the success of the strategies.

- a) How the Principles and Values of the administration and governing guidelines are disseminated and internalized in the organization;

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- b) How the High Administration, establishing an example to be followed, act personally in search of new opportunities for the organization and to promote commitment to all stakeholders.
- c) How the organizational Values and Principles are disseminated and internalized to the workforce and, when pertinent, to the other stakeholders;
- d) How is everyone encouraged to commit to excellence culture, highlighting the main actions undertaken to promote excellence in the organization.
- e) How current and potential leaders are assessed and developed in relation to the competencies wanted by the organization, highlighting:
 - i. Wanted competencies.
 - ii. Methods used to identify people with leadership potential.
- f) How the High Administration carries out the implementation of the management system of the organization, aiming to assure fulfilling the requirements of all stakeholders, highlighting:
 - i. Methods used to establish the main work standards that advise the execution suitable for practices of organization management and methods used to verify its completion and taking corrective actions when necessary.
 - ii. How resources are guaranteed to improve management, work infrastructure and internal and external communication system.
 - iii. Presenting commitments and completion standards, when applicable.
- g) How learning is stimulated in the organization:
 - i. Describing the main methods used to implement learning and developing improvements and occasional innovations in the managerial processes.
 - ii. Highlighting how the workforce is stimulated to generate new ideas, search innovations and improvements.
 - iii. Presenting main refinements (improvements and innovations) in the managerial processes implemented in the last periods to be stipulated.

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- Organization performance analysis.

This item examines the implementation of managerial process that has the objective to assure the completion of the operational performance planned and reaching the strategic objectives of the organization.

- a) How the necessities of comparative information are analyzed to assess organization performance:
 - i. Highlighting the criteria used to determine what are the most significant results to be compared.
 - ii. Presenting the types of information used to compare the performance and assess the completion of performance levels expected by the stakeholders.
- b) How performances of several levels in the organization are analyzed and the performance integrated to all the organization, considering the comparative information and meeting the main requirements of the stakeholders:
 - i. Highlighting the role of High Administration.
 - ii. Describing the main methods of analysis used, highlighting the way of gathering results.
 - iii. Citing the types of results analyzed and its range, including the ones related to the govern programs/actions under its responsibility, when applicable.
- c) How the success of strategies are assessed and the reaching of respective objectives of the organization from remarks about the analysis of its performance;
- d) How the decisions from the organization performance analysis are communicated to the workforce, in all levels of the organization and to the stakeholders, when applicable;
- e) How the implementation of decisions coming from the organization performance analysis is followed up.

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5.2.1.2 *Strategies and Plans*

This criterion examines as organization, from its vision of the future, from the analysis of internal and external environments and its institution mission make its strategies, unveil them in short-term and long-term action plans and follow its implementation, aiming to complete its mission and the stakeholders satisfaction.

- Strategies formulation

This item examines the implementation of managerial processes that have the objective to formulate strategies, focusing the analysis of the operating sector, macroambient and the institutional model of the organization. It also examines the process of following the internal and external environments.

- a) How the process of formulating the organizational policies is, when applicable, highlighting how the organization identifies the institutional universe and the actors involved in the public policies that it participates as formulator and/or executor, when applicable.
- b) How the process of formulating the organization strategies is, presenting the main stages and areas involved in the process.
- c) How the aspects related to external environments are considered in the process of formulating the strategies, highlighting:
 - i. The considered aspects.
 - ii. How the organization related to other bodies and entities to establish partnerships with the will of better following its institutional mission.
- d) How the internal environment analysis is carried out, highlighting how it is considered in this analysis, the knowledge of the organization.
- e) How the strategies are assessed and selected:
 - i. Highlight the main selected strategies and the alignment with the objectives of the organization and the respective fundamental aspects for its success.
 - ii. Cite how the organization inserts the sustainable development in its strategy aiming to reach favorable results in social, environmental, and economic areas when applicable.

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- f) How the organization areas and the stakeholders, when applicable, are involved in the process of formulating strategies;
- g) How the strategies are communicated to the stakeholders to establish mutual commitments.

- Strategies Implementation

This item examines the implementation of managerial process, which has the objective to assure the unfolding, completion, follow-up, and update of the organization strategies.

- a) How the indexes for assessing strategy operationalization are defined, established the short-term and long-term goals and defined the respective action plans, highlighting:
 - i. The main indexes, goals and action plans, highlighting those related to reducing costs and improvement on the quality of the services.
 - ii. How the projections about the comparatives referentials used by the organization are done.
 - iii. And the involvement of the workforce in elaborating the action plans.
- b) How the established goals are unfolded to the areas of organization, assuring coherence between the indexes used in assessing the implementation of strategies and those used in assessing the process performance;
- c) How the action plans are unfolded to the areas of organization, assuring coherence with the selected strategies and consistency between respective plans;
- d) How the different resources are allocated to assure implementation of action plans, presenting the main financial resources and non-financial allocated.
- e) How goals, indexes and action plans are communicated for the workforce and, when applicable, to the other stakeholders;
- f) How monitoring of action plan implementation is performed.

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5.2.1.3 Clients

This criterion examines how an organization, in performing its institutional competencies, identify the Clients of its services and products, know their needs and evaluates its capacity in fulfilling them, anticipating to them. Also approaches how it happens to its announcement of services, products and actions to strengthen its institutional image and how the organization narrows the relationship with its citizen users, measuring their satisfaction and implementing and promoting actions of improvement.

- Image and mutual knowledge

This item examines the implementation of managerial processes that has the objective to announce products and services, make the image favorable and conquer citizens' trust.

- a) How the organization clients are identified and how they are classified by types or groups, highlighting:
 - i. How current and potential Clients are identified.
 - ii. The criteria used to group its Clients.
- b) How needs and expectations of the Clients, current and potential, and ex-Clients, when applicable, are identified, analyzed and comprehended and used to define and improve products, services and processes of organization, describing methodologies used to determine the importance related to needs and expectations identified.
- c) How products and services, completion standards and actions to improve the organization are announced to the clients and to society in a way to create credibility, trust and positive image, highlighting the methods used to assure clarity, authenticity and suitable content of the announced messages.
- d) How the levels of knowing the potential universe of clients about the organization are identified, their services, products and actions. And how the organization image is evaluated before the Clients, presenting:
 - i. The attributes defined by the organization to characterize its image.
 - ii. The main indexes used to measure the organization image and knowledge of its services, products and its organizations before its users.

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e) How completion of the potential universe of the identified Clients is evaluated, highlighting the main indexes used and actions that follow.

- Relationship with Clients

This item examines the implementation of managerial processes, which have as objective the implementation of access channels to request assistance, complaint or suggest; the management of complaints; satisfaction and dissatisfaction evaluation and following services/products recently delivered.

- a) How the main access channels are defined and announced to the clients to request information or clarifications about the services and products or communicate their suggestions or complaints, highlighting the main access channels made available for the clients.
- b) How clients' complaints and suggestions, formal or informal are treated, aiming to assure quick and efficient answer and the organization taking advantage of it, highlighting the main actions followed and how they are informed to clients and forwarded to the other areas of the organization.
- c) How services and products, recently provided or delivered are followed together with the clients so to allow the organization to generate fast and efficient solutions to avoid relationship problems and fulfill the clients expectations;
- d) How client satisfaction and dissatisfaction are assessed in relation to products or services of the organization and those competing against, when applicable;
- e) How information obtained from clients is used to improve the level of satisfaction, outlining the main implemented actions.

5.2.1.4 Society

This criterion examines how the organization approaches its responsibility before society and the communities directly affected by its processes, services and products and how it stimulates citizenship. Examines, also, how the organization operates in relation to

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the public policies of its sector and how stimulates the social control of its activities by Society and ethical behavior.

- Socio-environmental action

This item examines the implementation of managerial processes, which have the objective of assuring that their products, services, processes and facilities be safe to users and population and stimulate sustainable development.

- a) How aspects and treaties of social and environmental impacts of products, services, processes and facilities of the organization are treated, since the project until the final disposition, about the ones which have influence, describing the following aspects:
 - i. The main actions and goals to eliminate minimize or pay off the negative social and environmental impacts, including social and environmental liability treatment.
 - ii. The existing plans to address occasional emergency situations aiming to reducing negative consequences.
- b) How social and environmental impacts of services, products, processes, and facilities, as well as respective policies, actions and results are communicated to society, highlighting the criteria adopted to select and prioritize information announced and channels adopted.
- c) How pending matters or occasional sanctions are treated in relation to legal, regulatory, ethical or contract requirements reporting the currently existing ones;
- d) How actions that involve conserving non-renewable resources are promoted, as well as to the ones preserving ecosystems and optimization of renewable resources use;
- e) How the work force, suppliers and other stakeholders are made aware and involved in issues related to socio-environmental responsibility;
- f) How the organization address efforts to strengthen society running or supporting social projects or projects aiming to national, regional, local or sectorial development, when applicable, presenting:

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- i. The criteria established to select projects to be implemented or supported and cite the main on-going and implemented projects.
 - ii. The main indexes for execution control and social project impact.
- Ethics and social control

This item examines the implementation of managerial processes, which have as objective to encourage participation of society in controlling activities of the organization, stimulating transparency and ethical behavior.

- a) How acts and information are officially announced about plans, programs and organization projects, highlighting the methods used to ensure that information will be understood and interpreted.
- b) How information related to physical, budget, financial and organization management execution become public and its access democratized;
- c) How communication channels are made available to receive occasional complaints about ethical violation, highlighting how the actions taken to attenuate these happenings and their effects.

- Public policies

This item examines the implementation of managerial processes that have as objective to act in the public policies on the segment the organization operates, be it as formulator or executor, including its assessment and dissemination.

- a) How the necessities of society are identified in relation to the operation sector of the organization and transformed into requirements to formulate and perform the public policies, when applicable?
- b) How the organization contributes in formulating or acts in carrying out the public policies of its sector, highlighting:
 - i. The main public policies in which the organization operates.
 - ii. The level of action and the main actors involved.
 - iii. How ensures participation in society.
- c) How administrative practices are disseminated and its respective objectives to the community in Lot 1 of the PTCD, highlighting the main communication channels used.

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- d) How carrying out the administrative practices, in its operation level, is monitored and evaluated, presenting the impact indexes and other indexes used and its relationship with established requirements.

5.2.1.5 Information and Knowledge

This criterion examines the management of information, including the gathering of comparative information. It also examines how the organization identifies, develops, keep and protect their knowledge.

- Organization Information

This item examines the implementation of managerial processes, which has the objective of enabling updated and integral information to the users and ensuring its reliability.

- a) How the needs of collecting, treatment and keeping information safe are identified in order to support daily operations, follow the strategies and the progress of the action plans and subsidize decision-making in all levels and areas of the organization?
- b) How the main information systems are defined, developed, implemented and updated aiming to satisfy the needs identified about the organization and the users, highlighting the following aspects:
- i. The main information systems in use and its purpose.
 - ii. How the integration of information systems of the organization is carried out with the administrative management system from the government.
 - iii. The main technologies employed aiming to integrate information and systems.
- c) How the administrative memory of the organization is established, highlighting the main types of register and its main uses.
- d) How the information management is used to support completing the institutional mission and promoting the integration of the organization with its clients, society, suppliers and partners;

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- e) How the information needed are made available to internal people and also external to the organization, including clients, suppliers and partners;
- f) How the safety of information is managed, establishing the methods used to guarantee updating, reliability, integrity, preservation and availability of information.

- Comparative Information

This item examines the implementation of managerial processes that aim to search information about other organizations to compare the performance and improve products and products/services.

- a) How the organizations considered as pertinent comparative referential are identified, highlighting the criteria used to define the importance of the organizations to compare and present the main organizations identified.
- b) How the sources are identified, obtained and kept updated the comparative information, informing the criteria used to determine the most appropriate method of collecting, considering the sources of identified comparative information.
- c) How the information obtained is used to improve knowledge of organizational processes, establishing daring goals and promoting improvements in the organization development, informing the main actions of improvement implemented after the use of comparative information.

- Knowledge Management

This item examines the implementation of managerial processes that have as objective to identify, develop, build, protect and share knowledge.

- a) How knowledge is developed and shared in the organization, describing:
 - i. The existing practices to identify, treat and share knowledge considered relevant for the organization.
 - ii. The methods to identify, develop and incorporate new technologies.

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- b) How knowledge is kept and protected, describing the methods employed to attract and retain specialists.
- c) How the organization assures that the management of knowledge be used to improve its processes, products and services;
- d) How the intangible assets of the organization is identified, developed and measured?

5.2.1.6 People

This criterion examines the work systems of the organization, including the organization of work, structure of jobs, processes related to selection and hiring people, just as the management of people and team performance. Also examines the processes related to capacitation and development of people and how the organization promotes quality of life of people inside and outside the work place.

- Work systems

This item examines the implementation of managerial processes, which have the objective of structuring jobs; functions and salaries; providing jobs and functions; assessment and recognition/reward systems, which have the purpose of stimulating people and team performance.

- a) How the work organization is defined and implemented addressing the high performance of the organization, highlighting:
 - i. The opportunities for the participation of people in the processes of organization, enabling the initiative, creativity, innovation and development of its potential.
 - ii. The level of autonomy of people to define, manage and improve the processes of organization with flexibility and rapidity in the answers to the clients interest.
- b) How people are selected to fulfill the jobs and functions, along with the strategies, objectives and mission of the organization, describing:
 - i. The competencies and skills needed for the jobs and functions.
 - ii. In what way the requirements of performances are considered and are ensured fairness of opportunities for everyone.

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- c) How channels of interlocution are defined and made available and the negotiation with the workforce of the organization, when it is the case;
- d) How the integration and cooperation of people and teams are stimulated, highlighting:
 - i. Practices used to integrate recently hired people and reallocated aiming to prepare them to perform their functions.
 - ii. In what way the efficient communication is ensuring between the areas of organization.
- e) How the performance of people and teams is managed, so to stimulate obtaining the high-performance goals, the excellence culture of the organization and professional development, highlighting how career progression is structured.
- f) How the salary system, reward/recognition system and incentives for people stimulate reaching high-performance, learning and excellence culture goals.

Note:

In this item, it should be explained how the practices of people management take into account the different groups of people of workforce - such as the ones hired in integral or partial time, temporary, self-employed and outsourced people who work under straight supervision of the organization – clarifying, when necessary, the existing differences.

The terms of reward/recognition and incentives include promotions and rewards, in money or not, formal or informal, individually or in group, which can happen based on performance, on acquiring knowledge, skills and competencies or other factors.

- **Capacitation and development**

This item examines the implementation of managerial process, which has the objective to capacitate and develop people of the organization.

- a) How the need for capacitation and development are identified, describing the forms of participating of leaders and workforce people in this process.
- b) How the need for capacity and development of people are brought into line with the needs of the organization in order to define the capacitation and development programs, describing:

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- i. The development actions of managers and people with leading position.
 - ii. The capacitation actions of people who operate straight with the clients.
- c) How the capacitation and development programs approach the excellence culture and contribute to consolidate the organization learning, citing the main themes approached and the target audience reached.
 - d) How the way of making capacitation and development programs is conceived, considering the needs of the organization and people and the available resources;
 - e) How the skills and knowledge acquired are assessed in relation to its usefulness in carrying out the work and its efficiency in meeting the organization strategies;
 - f) How the integral development of people, as individuals, citizens and professionals is promoted, describing the methods of orientation and advising, employability and career development.

Note:

In this item, it should be explained how the practices of people management take into account the different groups of people of workforce - such as the ones hired in integral or partial time, temporary, self-employed and outsourced people who work under straight supervision of the organization – clarifying, when necessary, the existing differences.

5.2.1.7 Processes

This criterion examines how the organization manages, analyzes and improves the end processes and support processes. It also examines how the organization manages the supplying process, highlighting the development of its supplying chain. The Criterion approaches how the organization manages its budget and finance processes, aiming its support.

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- End processes and support processes

This item examines the implementation of managerial processes, which have the objective of ensuring a high-performance of processes and generate services and products that meet the needs and expectations of citizen-users and the society.

- a) How end and support processes are identified and determined, considering the institutional mission of the organization;
- b) How the clients and society needs are translated into requirements and incorporated in the projects of services or products and in the end processes, highlighting the following requirements:
 - i. Environmental, health, safety and ergonomics, when pertinent.
 - ii. To be met and its respective performance indexes.
- c) How the end and support processes are projected, aiming to complete the requirements defined, highlighting the methods used to incorporate the available knowledge in the organization.
- d) How end processes and support processes are controlled, highlighting:
 - i. The control of processes related to institutional partnerships.
 - ii. How the non-conformities identified are treated.
- e) How end processes and support processes are refined, describing:
 - i. The main methodologies used to increase reliability of products or services provided by the organization.
 - ii. The actions to reduce bureaucracy of the main end processes and support processes.
 - iii. The actions of optimization of costs associated to the end and support processes.
 - iv. The main improvements implemented in the last periods.

- Supplying processes

This item examines the implementation of managerial processes, which has the objective of developing and improving the performance of the supply chain, ensuring the activities of acquiring goods, supplies and services, the classification, the meeting of supplying requirements and assessment of the suppliers

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- a) How the organization identifies potential suppliers and develop its supplying chain to ensure the making long-term supplying available, improving its performance and sustainable development of its own chain;
- b) How the process of acquiring goods, supplies and services is carried out so to ensure transparency, highlighting the following aspects:
 - i. Meeting the needs and specific requirements of the organization.
 - ii. The indexes used to assess the supplying process.
- c) How the quality of goods, products and services acquired is assured, highlighting:
 - i. The way suppliers are identified and qualified.
 - ii. The way how balance in quality, deadline and price is obtained.
- d) How the management of material goods, assets and storage goods is carried out, when applicable, including the indexes used.
- e) How the relationship with the suppliers is managed, highlighting how meeting the organization requirement is defined and ensured by the suppliers.
- f) How suppliers are assessed and immediately informed about their performance, presenting:
 - i. The indexes used to monitor their performance.
 - ii. The way in which the assessment considers meeting the requirements established, the values and guidelines of the organization and the aspects related to safety, health and environment.
- g) How costs associated to supply management are reduced;
- h) How suppliers that operate directly in the processes of organization are involved and committed with the Organizational Principles related to socio-environmental responsibility, including the aspects of safety and health?

Note:

In item C, describing practices of information provision to suppliers, exchange and integration forms that allow the suppliers being always informed about the efficiency of services and products that provide so that they can promote the corrections needed.

- Budget and finance processes

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This item examines the implementation of managerial process, which has the objective the budget and finance support of the organization.

- a) How the budget proposal is elaborated and how the restrictions and releases of more significant budgets are treated, which can come to affect the performance of its activities;
- b) How budget and finance processes are managed to support the strategic and operational needs of the organization?
- c) How the budget and finance execution and possible realignments among budget, strategies and objectives of the organization are monitored, highlighting how the financial risks are assessed and administered, when applicable.
- d) How the best options selected and borrowings, investments and application of financial resources done, when pertinent;
- e) How the operations are followed in terms of budget and finance and how the budget and finance parameters are administered, highlighting:
 - i. The management of the asset and budgets coming from its use;
 - ii. The compatibility of funding and investment with the approved budget – fiscal responsibility;
 - iii. The management of budgets derived from collecting fees by service provision or taxes.

5.2.1.8 Results

This criterion examines the results of the organization, ranging the budget-financial results, the ones related to the clients, to society, to people, to end and support processes, as well as the ones related to supplying. The evaluation of results includes a tendency analysis and the current performance level, by verifying the meeting of expectation levels of stakeholders and by the comparison with the performance of other organizations.

- Results related to clients

This item examines the results related to clients, including the ones referring to the image of the organization.

In this item it should present the results of the main indexes related to the clients, separating by groups of clients, market segments or types of products, including levels of

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performance associated to the main requirements of the stakeholders, as well as the performance levels of organizations considered pertinent comparative references; briefly explain the results presented by clarifying occasional adverse trends, levels of performance below the expected by the stakeholders and unfavorable comparisons.

- Results related to the society

This item examines the results related to society, including the ones related to socio-environmental, ethics, social control and public policies presenting results of the main indexes related to society, including the ones related to socio-environmental operation, ethics, social control and public policies.

It should include the levels of performance associated to the main requirements of stakeholders, as well as the performance levels of organizations considered pertinent comparative references; briefly explain the results presented by clarifying occasional adverse trends, levels of performance below the expected by the stakeholders and unfavorable comparisons.

- Budget and finance results

This item examines the budget and finance results of the organization including those related to the structure, liquidity, activity and profitability, where applicable.

a) Present the results of the main indicators related to the budget and finance management, and should:

- i. Include the levels of performance associated to the main requirements of stakeholders, as well as the performance levels of organizations considered pertinent comparative references; briefly explain the results presented by clarifying occasional adverse trends, levels of performance below the expected by the stakeholders and unfavorable comparisons.
- ii. Presenting the:
 - Efficiency results in applying budget and finance resources of the organization; highlighting the results of the following indexes: relation-

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ship between the resource performed versus resource planned and meeting the goals planned versus resources performed;

- Development results in conserving assets and collecting revenues derived from its use, where applicable;
- The revenue collection results that derived from collecting fees by service provision or taxes, where applicable;
- Related to finance performance and/or economic values, in case of public companies and mixed-economy societies that are operating in the market.

- Results related to people

This item examines the results related to people, including those related to work systems, to capacitation and to development and life quality.

It should present results of the main indexes related to people, including those related to work systems, to capacitation and to development and life quality. Stratify the results by groups of people from the workforce, functions in the organization and, include:

- a) The levels of performance associated to the main requirements of stakeholders, as well as the performance levels of organizations considered pertinent comparative references; briefly explain the results presented by clarifying occasional adverse trends, levels of performance below the expected by the stakeholders and unfavorable comparisons.
- b) Results of the main efficacy indexes and improvement of work systems; assessment, capacitation and development of people and welfare and people's satisfaction.

- Results related to supplying processes

This item examines the results related to acquired products and management of supplying processes.

It should present the results of the main indexes related to products acquired and to management of relationship with suppliers. Stratify the results by supplier groups or types

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of products acquired, where applicable and include the levels of performance associated to the main requirements of stakeholders, as well as the performance levels of organizations considered pertinent comparative references; briefly explain the results presented by clarifying occasional adverse trends, levels of performance below the expected by the stakeholders and unfavorable comparisons.

- Results of end processes and support processes

This item examines the results related to products/ services and to the management of supplying and support processes.

It should present the results of indexes related to the product/service and to the management of end and support processes, including the levels of performance associated to the main requirements of stakeholders, as well as the performance levels of organizations considered pertinent comparative references; briefly explain the results presented by clarifying occasional adverse trends, levels of performance below the expected by the stakeholders and unfavorable comparisons.

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6 COMPANY CAPACITY OF ADAPTATION ON THE BUSINESS ENVIRONMENT

The PTCD manager should find ways of building competitive innovation strategies, using methods and practices of constant innovation (certificates, technology, P&D, marketing, benchmarking, HR training), and manage development in several competitive dimensions (logistics, trade, flexibility, quality and production, among others), so to help domestic companies to grow each and every time inside the Park environment, changing the place into a desirable and interesting place to be for companies outside the Park. Specifically, in this sense, it will be in charge for the following adaptation actions:

- Structure and follow the admission process of candidate companies, establishing criteria, analyzing the submitted projects by the candidate companies and publically announcing the admission and concession of lots;
- Follow the installation and operation of entities admitted, verifying whether the activities correspond to the approved project;
- Contribute for the synergy environment of the entities in the Park and from these ones to the other actor of innovation and development of DF, municipalities and the Mid-West Region;
- It should always pay attention in finding resources with funding sources, such as sectorial funds, regional funds and other incentives, not only for support of cooperative projects as well as resource for domestic companies;
- Create options of subjects that might be interesting for companies, and that can be used as an advantage of the park in attracting companies, such as example of structuring business management processes (strategy, logistics, acquisition, trade) and support (human resources development, quality/ environment management, legal/administrative support and information management) in a cooperation network environment.

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7 CONCLUSION

By means of a coordinated work and interdependent among Terracap and UnB teams, the activities in elaborating the Product 5.6 were planed, discussed, carried out and documented.

This product evaluated the conditions of the enterprise's organizational management to be developed, specifically in what refers to defining the probable organizational structure of the PTCD.

The conclusion of this product is important, because although the organization structure of the SPE management probably come to shape subsequently, by the Administration Council action of it, the definition here presented can surely be taken as a first modeling of the structure needed.

Indeed, the project will have a good development if its administrative structure is based in criteria absolutely technical and its staff composition have technical qualification and operation profile inherent in each function, as well as characterizing itself as a simple and clean structure each stage, but one that can be able to grow together with the park. Particularly, the organizational structure and its composition should:

Count with people who have business skills and charisma, making them able to relate well with several actors involved in the development of the project;

Check continuously what is happening the Federal District's economy and municipalities, so to take a stand as an actor of the regional economy chain, contributing and generate development for the local society.

The activities involved in this stage formally observed the execution of the methodology steps chosen to the project management, PMP/PMI.

The UnB team considers that had access to all information needed to good execution of the works and the availability of the information here presented by Terracap's team, just as the joined activities of analysis and discussion, did a good work in the project stage.

Brasilia, March 30, 2012.

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