Proposal of a Methodology of Stakeholder Analysis for the Brazilian Satellite Space Program

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Abstract: *To ensure the continuity and growth of space activities in Brazil, it is fundamental to persuade the Brazilian society and its representatives in Government about the importance of investments in space activities. Also, it is important to convince talented professionals to place space activities as an object of their interest; the best schools should also be convinced to offer courses related to the space sector; finally, innovative companies should be convinced to take part in space sector activities, looking to returns, mainly in terms of market differentiation and qualification, as a path to take part in high-technology and high-complexity projects. On the one hand, this process of convincing or, more importantly, committing these actors to space activities, implies a thorough understanding of their expectations and needs, in order to plan how the system/organization can meet them. On the other hand, if stakeholders understand how much they can benefit from this relationship, their consequent commitment will very much strengthen the action of the system/organization. With this framework in perspective, this paper proposes a methodology of stakeholder analysis for the Brazilian satellite space program. In the exercise developed in the article, stakeholders have been identified from a study of the legal framework of the Brazilian space program. Subsequently, the proposed methodology has been applied to the planning of actions by a public organization.*

Keywords: *Brazilian Space Program, Stakeholders Analysis, Management of Organizations.*

INTRODUCTION

Modern management concepts indicate that the success of companies and organizations will be greater the better is their relationship with customers, suppliers, employees, shareholders, and community (Svendsen, 1998; Fleisher and Bensoussan, 2007). These actors, technically known as interested parties or stakeholders, will cooperate with the organization more effectively if they are convinced that their needs and expectations, in their relationship with the system/organization, will be fulfilled. The resulting commitment will ensure the sustainability of the organization, i.e., its economic survival in a competitive environment. This applies both to private and public organizations.

In societies with deficiencies in basic sectors, such as health, education, security, employment, among others, the survival of public organizations is related, additionally, to their operational effectiveness and to their capacity of attracting funding, especially in the space sector, where returns are

not so easily perceived by society and public agents, who, ultimately, are responsible for the buget allocation.

With the increasing range of applications of space technologies, the justification for the existence and maintenance of space activities go beyond geo-political and scientific reasons, to include also economic, commercial, and social issues.

In addition to financial resources, institutions responsible for space activities also depend on the existence and availability of other factors, which are also essential, such as skilled workforce and highly qualified suppliers, among others.

Therefore, for a country to develop space activities, beyond convincing society and Congress representatives of the importance of these activities, it is also necessary to convince talented professionals to place space activities as an object of their interest; the best schools should also be convinced to offer courses related to the space sector; finally, innovative companies should be convinced to take part in space sector activities, looking for returns, mainly in terms of market differentiation and

qualification, as a path to take part in high-technology and high-complexity projects.

On the one hand, this process of convincing or, more importantly, committing these actors to Space Activities, implies a thorough understanding of their expectations and needs, in order to plan how the system can meet them. On the other hand, if the stakeholders understand how much they can benefit from this relationship, their consequent commitment will strengthen the system in a way that the organization could never do it alone.

Based on these observations and hypotheses, this paper proposes a methodology for the analysis of stakeholders of the Brazilian Space Program, specifically those related to the *Instituto Nacional de Pesquisas Espaciais* (INPE). The stakeholders were identified from a careful scrutinizing of the legal framework of the Brazilian Space Program. Once the stakeholders were identified, answers to the following questions were sought for: What are their interests? What are their influence over the system/organization? Which are the opportunities and challenges related to the functions that the stakeholders expect from the system/organization? These answers may, in principle, be used to define and balance requirements for the system/organization, as well as to design and plan functions to be implemented.

In conclusion, the main objective of this study has been to identify stakeholders of the Brazilian Space Program – satellite by-product, and then to illustrate the potential of stakeholder analysis as applied to the design and planning of functions to be performed by a public system/organization in the space sector, aimed at meeting the needs and expectations of its stakeholders. In this analysis, although the identification of stakeholders has been carried out with some accuracy, the design and planning of functions have been carried out via a free exercise by the authors, and not by objective evidence produced through interviews or other methodologies.

STAKEHOLDERS - CONCEPTS, CLASSIFICATIONS, AND METHODS OF ANALYSIS

The identification and evaluation of the needs of the totality of actors interacting with a system/organization is not a new subject in the areas of Business Ethics and Organization Theory. Freeman (1988) proposed the concept of stakeholder as any group or individuals who can affect or be affected by a company. Examples include shareholders, creditors,

managers, customers, suppliers, local community, and general public. This concept has been further elaborated by Weiss (in Branco *et al.*, 2009), who consider that stakeholders are individuals, groups or organizations, which can influence the stages of development of a company.

Several authors dealing with this subject argue that the environment of a company is heavily conditioned by the action of stakeholders (Araújo Jr., 2008; Freeman, 1988; Svendsen, 1998; Boaventura and Fischmann, 2007). According to Araújo Jr. (2008), analyzing a stakeholder is equivalent to analysing the environment in which the company operates, identifying the main actors in this environment and, then, evaluating the influence of these actors on the company and on the environment itself. Branco *et al.* (2009) state that a system/organisation exists to generate value for its stakeholders and that the functions performed by the system/organization, most valued by its stakeholders, must be the basis to develop the system/organization.

Thus, the stakeholder analysis, comprising the processes of identifying stakeholders, understanding their needs and evaluating their influence over the system/organization, may contribute significantly to the design and planning of the functions to be performed by the system/organization. In this article, such an application of a stakeholder analysis will be demonstrated in the scope of the Brazilian satellite space sector.

According to Wood (1990), stakeholders can be classified into two main categories: primary – owners, customers, suppliers, employees and competitors – and secondary– internal and foreign governments, media, community, nonprofitable organizations, financial analysts and institutions. In this paper, it will be proposed a classification adapted to the specificities of a public institution, containing ten categories.

Some authors have developed models for stakeholder analysis, as in Boaventura and Fischmann (2007), Freeman (1984), Weiss (2009), Svendsen (1998) and Carroll and Buchholtz (2000). The initial step of the analysis, according to these authors, is the identification of stakeholders. As a criterion for identifying a stakeholder, Mitroff (Boaventura and Fischmann, 2007) proposes that each stakeholder shall present at least one relevant characteristic for the system/organization, among the following: aims and motivations; benefits or potential benefits; the resources they control (material, political, and skills); distinctive knowledge; legal commitments or others; and relationship with other stakeholders in terms of power, authority, accountability, and credibility.

These definitions, concepts and methods of analysis form the basis of the methodology of stakeholder analysis developed in the following sections.

PROPOSED METHODOLOGY FOR STAKEHOLDER ANALYSIS

According to Boaventura and Fischmann (2007), the models of stakeholder analysis, when used for analyzing a system/organization, usually comprise the following steps: identification of stakeholders; description of their interests, policies, and behaviours; identification of the level of their satisfaction; identification of how they can influence the sector, considering the possible interactions between stakeholders; assessment of the impact of each stakeholder in the sector/industry; and hierarchical classification of the stakeholders.

In this study, the proposed methodology for stakeholder analysis for the Brazilian Space Program, satellite by-product, will follow the directives of Boaventura and Fischmann, and will comprise the following steps:

- identification of stakeholders, from an analysis and study of the legal frameworks of the Brazilian Space Program, satellite by-product;

- classification of the identified stakeholders into more general categories to facilitate the process and analysis; the organization in categories will be made according to criteria based on the dimensions proposed by Mitroff, described to identify stakeholders;

- identification and ranking of the interests of each category of stakeholders; the set of interests of each category of stakeholders is obtained by simple agglutination of the interests of all stakeholders in that category; interests correspond to the aspects the stakeholder value most and expect to be fulfilled in its relationship with the system/organisation; each interest will be ranked according to its relative level of importance from the standpoint of the stakeholder, by assigning a weight according to the following scale: 1 - very little importance; 2 - little importance; 3 - fair importance; 4 - great importance; and 5 - very great importance; ideally, this step should be implemented through structured interviews with representatives of each category of stakeholders; in this study, concerned mainly with a demonstration of the potential utility of a stakeholder analysis, however, interests of each category of stakeholder, and the ranking of these interests, will be conjectured; for each category of stakeholders a figure of merit representing the level of interest of that category in the system/organisation will be computed through a simple arithmetic average of the weights attributed to interests in the previous step;

- identification and ranking of the influences of each category of stakeholders on the system/organization, as perceived by the system/organization; the set of influences of each category of stakeholders is obtained by simple agglutination of the influences of all stakeholders in that category; what each category of stakeholders has to offer to the system will be estimated, and the relative level of importance of these assets to the system/organization will be ranked; the ranking will be implemented using the same scale as used for ranking the interests of stakeholders; ideally, this step would be accomplished through structured interviews, carried out within the organization, with skilled staff; as in the previous step, however, possible influences of each category of stakeholders over the system/organization, and the ranking of these influences, will be conjectured, in a free exercise; for each category of stakeholders a figure of merit representing the level of influence of that category on the system/organization will be computed through a simple arithmetic average of the weights attributed to influences in the previous step;

- hierarchical classification of stakeholders, considering the levels of interest and influence estimated in the previous steps; since the ranking of interests and influences of categories of stakeholders, in previous steps, has been accomplished through a free exercise, the classification that emerges from this step has to be seen as the result of a free exercise, as well;

- identification of the functions to be performed by the system/organization in order to meet the expectations of the stakeholders; the interests and influences of each category of stakeholders, identified in previous steps, will guide the design and planning of functions within the system/organization; the process of designing and planning functions should be carried out making the best possible use of the opportunities made available through the influences of each stakeholder category; finally, for implementing

this step, it is necessary to evaluate the already existing management processes in the system/organization and to identify, for each function to be performed, those already implemented, those to be implemented for the first time, as well as the opportunities for improvements.

Next, as a demonstration of the application of this methodology to space activities, it is developed an exercise in which the proposed methodology is applied to the Brazilian satellite space program.

EXERCISE OF APPLICATION OF STAKEHOLDER ANALYSIS TO THE BRAZILIAN SATELLITE SPACE PROGRAM

In this section, the proposed methodology, described in the previous section, is used in the identification of categories of stakeholders of the Brazilian Space Program, satellite by-products. Its applicability to the design and planning of the functions of a system/organization is demonstrated through an exercise, in which interests and influences of each category of stakeholders are conjectured and ranked, and used in modelling the processes in a system/organization to meet the needs and expectations of each category of stakeholders.

The exercise of application of the proposed methodology follows the steps described previously, although, as already advanced, the information related to the steps of identifying and ranking interests and influences has been conjectured, rather than obtained through structured interviews with representatives of categories of stakeholders and of the system/organization. INPE has been taken as the system/organization of reference for this exercise.

Identification of stakeholders and grouping in general categories

Stakeholders of the Brazilian Space Program – satellite by-products – were identified from a careful reading and studying of the legal framework to the Brazilian Space Program related to satellites. Table 1 lists the set of documents used for this purpose.

In total, 42 stakeholders explicit or inferred from the text were identified, who were grouped into ten different categories, as follows: Federal Government and Congress, Industrial Sector, Education, Science, International Partners, Staff, Security, Media, and Brazilian Society. This categorization

Table 1. Legal framework of the Brazilian Space Program related to satellites.

Decree No. 51.133, from 08/03/1961	Creation of the Organizing Group of the National Commission of Space Activities (GOCNAE).
Decree No. 68.532, from 04/22/1971	The Institute for Space Research (INPE) is created in substitution of the CNAE.
Decree No. 68.099, from 01/20/1971	Creation of the Brazilian Commission for Space Activities (COBAE), with the responsibility of establishing policies and programs related to space activities in Brazil.
Decree No. 1.332, from 12/08/1994	The National Policy for Development of Space Activities (PNDAE) and the Brazilian Space Agency (AEB) are established.
Decree No. 1.953, from 07/10/1996	The National System for development of the Space Activities (SINDAE) is established.
National Program of Space Activities 2005-2014	The current ten-year planning for the Brazilian Space Program is established.

has been developed based on the criteria of performance area and distinctive knowledge, i.e., stakeholders with major intersection in terms of performance area and distinctive knowledge, from the perspective of the system/organization, were gathered in the same category. Table 2 displays the stakeholders identified and their categorisation, according to the directives given above.

Additionally, a few stakeholders, that have not been identified from the legal framework but that can have a competitive attitude in relation to the system/organization, such as foreign space technology competitors and foreign commercial competitors, are also displayed in Table 2.

Interests and influences of stakeholders

The interests of a stakeholder have been identified with the expectations of the stakeholder in relation to the system/

Table 2. Stakeholders of the Brazilian Space Program, satellite by-product.

Federal Government and Congress	1. Presidency of the Republic; 2. Legislators; 3. Brazilian Space Agency (AEB); 4. Ministry of Science, Technology and Innovation; Ministry of Environment and other ministries; Secretary of the Republic Presidency and Inter-ministerial Commissions; 5. States, Federal Districts, and Cities.
Industrial Sector	1. Suppliers; 2. Industrial Sector benefitted by industrial policies; 3. Industrial Sector as suppliers of products or specialized services; 4. Industrial Sector as costumers of the facilities of INPE for qualification of its products or services.
Education – related to INPE's post-grad activities	1. National and International Entities for technical and scientific cooperation; 2. Research and Education Fostering Agencies; 3. Conferences, symposiums and other national and international academic meetings; 4. Technical and scientific publications; 5. Technical and scientific national and international events; 6. Post-grad students; 7. Other institutions for team training.
Science – related to the INPE's scientific and research activities	1. Conferences, symposiums, and other national and international academic meetings; 2. National and international scientific organizations; 3. Technical and scientific publications; 4. Technical and scientific community; 5. Researchers and technologists; 6. Support Institutions for scholarships; 7. Post-grad students.
International Partners	1. National and International Entities of technical and scientific cooperation; 2. Space Agencies of other countries; 3. Foreign Companies with (potential) commercial relationship with Brazil; 4. Partners International Institutions.
Staff	1. Skilled Human Resources; 2. Researchers and technologists; 3. Institutions for team training; 4. Human Capital – Staff of INPE.
Media	1. Magazines, newspaper and television, as well as other technical and scientific publications; 2. Instruments for disclosure of results and services provided by the Institute.
Brazilian Society	1. Skilled Human Resources; 2. Costumers of space products, weather forecasting, global climate changes, and other products and services provided by the Institute; 3. Brazilian Society.

Table 3. Interests and influences of stakeholders of the Brazilian Space Program of INPE.

Stakeholder	Interests	Influence
Federal Government and Congress	Popular approval; national and international political support; achievement of goals and budget execution; to provide products and services for the Brazilian society - data and technology; international agreements; political visibility; industrial competitiveness and jobs; monitoring of Brazilian natural resource.	Laws to facilitate the mechanisms of hiring innovative products and services; approval of funds; hiring staff approval; international agreement for cooperation in space activities; establishment of priorities for space activities; political incentives for development of innovative activities; creation of conditions for building capabilities, as new universities, etc.
Industrial Sector	Jobs; new business; productivity and profitability; improvement of industrial infrastructure; improvement of infrastructure support (research and testing laboratories); new technologies; contracts with the public sector; development of challenging projects; spin-offs.	Jobs; skilled labor; autonomy to develop projects and programs; commitment with the quality, schedule, and costs in the development of space products; investment of private resources for developing projects and programs; response to the technological demands for the development of new projects.
Education	Training; scientific indicators; growth of scientific and technological knowledge; creation of infrastructure in schools and universities; inspiration for young people.	Skilled labor; Scholarship; emphasis in disciplines related to space activities.
Science	Technologies to meet scientific demands; scientific indicators; participation in national and international conferences; research interesting to agencies and industries; stock of scientific knowledge; scholarship.	Stock of scientific and technological knowledge; conferences and other scientific conclaves related to the space sector; skilled labor.
International Partners	International political support; commercial opportunities; sharing knowledge; cooperation for development of strategic products; services that Brazil can provide for countries with smaller experience in space technologies.	Training of qualified personnel; technology transfer; partnerships for exchange of technologies; supply of qualified components and equipment; financial resources; international discussions on matters related to the sector.
Staff	Jobs; best salaries; good working conditions; professional challenges; training/education.	Skilled labor; experience and capability; dedication; commitment with the objectives of the organization.
Security	Cooperation for the development of satellite launch vehicles; technology to develop products and services for military use; monitoring of the Brazilian territory; technological autonomy for development of projects of interest to national security.	Creation of demand for new products and projects for national defense; financial resources for new products and projects related to national security.
Media	News of interest to the general population and/or political impact; credibility.	Encouraging public opinion; dissemination and relationship with the general public.
Brazilian Society	Jobs; national pride; defense of sovereignty; generation of services for general society; monitoring of natural resources; inspiration for the young people.	Skilled labor; popular support; demand for products and services related to space activities; taxes.
Countries Leaders in Space Technology	Supremacy; national security concerns; prevention of the development of competitors in exploitation of space activities.	Export control of information and material pertaining to defence and military related technologies, including parts and materials qualified for space uses.
Countries that compete economically with Brazil	Interfere in the growth of the participation of Brazilian industries in the international trade; interfere in the development of the Brazilian economy.	Export control of information and material pertaining to defense and military related technologies, including parts and materials qualified for space uses.

organization under perspective. The identification of interests occurs concomitantly with the identification of the needs that the stakeholder would like to see addressed in its interaction with the system/organization. The influence, in turn, is related to the power of the stakeholder in affecting the organization, directly or indirectly, through actions in its sphere of influence. As already mentioned, in an actual application of the methodology, the identification of interests and influences shall be accomplished through interviews with representatives of each category of stakeholders and representatives of the organization. In this work, the interests and influences for each group of stakeholders were conjectured in a free exercise. Table 3 gives the result of the free exercise carried out in the scope of this work.

Each interest or influence listed has been ranked according to its level of importance from the standpoint of the stakeholder or system/organization, respectively, following the weights given in the section dealing with the methodology. Table 4 exemplifies the process of assigning weights for one of the ten groups of stakeholders.

Table 5 displays, for each category of stakeholders, figures of merit, representing the level of interest and the level of influence of that category on the system/organisation, computed by averaging the weights, for both interests and influences, exemplified in Table 4.

Hierarchical classification of stakeholders according to the level of interest and influence on the system/organization

An overall figure of merit representing the importance of each category of stakeholders for the system/organisation has been obtained by multiplying the figures of merit computed for interests and influences, and is given in Table 5. Classifying the set of category of stakeholders according to their importance for the system/organisation results in the ordered list shown in Table 6.

The information thus obtained may be taken as an important tool for the management of the system/organisation, and may be used to align the objectives of the organization with the needs and expectations of the most important stakeholders, which, depending on the situation, may be either those that have more interest in the system, or those that can affect most the system, or else those best scored in a balanced average, that considers both the interests and the influences.

It is important to note, that care must be exercised when defining the balance between interest and influence. This point may be illustrated by the exercise considered here, in which

Table 4. Assignment of factor for interests and influences related for each group of stakeholder.

	Main interests	Factor
Federal Government and Congress	Popular approval	4
	National and international political support	4
	Achievement of goals and budget execution	4
	Provide products and services for Brazilian society – data and technology	3
	International agreements	3
	Political visibility	3
	Industrial competitiveness and jobs	3
	Monitoring of Brazilian natural resources	4
	Average	**3.50**

	Influence over the system/organization	Factor
Federal Government and Congress	Laws to facilitate the mechanisms of hiring innovative products and services	5
	Approval of funds	5
	Hiring staff approval	5
	International agreement for cooperation in space activities	3
	Establishment of priorities for space activities	3
	Political incentives for development of innovative activities	4
	Creation of conditions for building capabilities, as new universities, etc.	3
	Average	**4**

categories of stakeholders have been ranked using the product of the scores obtained for interests and influences. Using figures of merit defined in this way, a category of stakeholders that has a high rank as regards the level of influence or the level of interest may get a low rank as regards the level of importance for the system/organisation. For instance, in the current example, "countries leaders in space technology" ranked first, as far as the level of influence is concerned, and eighth, as far as the overall level of importance is concerned. Thus, in an environment in which effects of stakeholders' actions, on operation of the system/organization, are critical, it would not be appropriate computing the overall level of importance by the product of the scores obtained for interests and influences. Rather, in such a situation, the level of importance should be computed using a different relationship between interests and influences, which reflects the relative importance between these two factors in the considered

Table 5. Order of the groups of stakeholders, considering the interests/influence over the system/organization.

	Stakeholders ordered by level of interest	Score	Stakeholders ordered by level of influence over the system/organization	Score
1	Science	3.71	Federal Government and Congress	4.00
2	Federal Government and Congress	3.50	Staff	4.00
3	Industrial Sector	3.33	Countries leaders in space technology	4.00
4	Brazilian Society	3.33	Industrial Sector	3.75
5	Staff	3.20	Science	3.67
6	International Partners	3.00	International Partners	3.50
7	Education	3.00	Education	3.33
8	Security	2.75	Brazilian Society	3.25
9	Media	2.67	Security	3.00
10	Countries leaders in space technology	2.33	Media	2.50
11	Countries that compete economically with Brazil	1.50	Countries that compete economically with Brazil	2.00

Table 6. Hierarchical classification of stakeholders according to the level of interest and influence over the system/organization.

Hierarchical classification of the identified groups of stakeholders	Ordering – interests versus influence
Federal Government and Congress	14.00
Science	13.62
Staff	12.80
Industrial Sector	12.49
Brazilian Society	10.82
International Partners	10.50
Education	9.99
Countries leaders in space technology	9.32
Security	8.25
Media	6.68
Countries that compete economically with Brazil	3.00

environment. In a generic scenario, one may take the overall level of importance as a general function of the weights for effects and interests relative to each particular stakeholder.

Functions that the system/organization must perform to meet the needs of its stakeholders

As a final step of the exercise, several functions that the system/organization must perform to meet the expectations of its stakeholders were identified. Again, we emphasize that these functions are fictitious, since all data inputs were conjectured rather than obtained through interviews or other methodologies.

Continuing the exercise, the functions were then classified according to their level of implementation within the system/organization, following these criteria: "Implemented" – functions already performed by the system/organization; "Improving" – functions implemented, but that need improvement to better meet the expectations of the stakeholders of the system/organisation; "To Implement" – functions that the system/organization does not perform and need to be implemented.

Table 7 illustrates the functions that the system/organisation must perform to meet the needs/expectations of some selected categories of stakeholders. The same procedure has to be carried out for all categories of stakeholders.

After completing the whole process so far indicated, there will emerge a list of functions that the system/organisation must consider in order to meet the needs/expectations of its diverse categories of stakeholders. By considering the hierarchical list of stakeholders, according to their importance for the system/organization, one may finally order

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Table 7. Functions that the system/organization must perform.

	Functions that the system/organization must perform to meet the needs/expectations of stakeholders	Implemented	Improving	To Implement
Science	Create mechanisms for helping technological areas to create demands for scientific areas.			x
	Encourage employee participation in conferences and other scientific conclaves in order to keep them current on best practices.	x		
	Create mechanisms for dissemination of scientific works developed within the Institution			x
	Promote conferences, workshops, and other scientific conclaves for discussing best practices in areas interesting to the Institute.	x		
Brazilian Society	Invest in the improvement of post-graduate courses offered by INPE .	x		
	Expand the Visitor Center in order to better meet (in quantity and quality) students and the general society.			x
	To improve exchanges between Institute-Schools-Universities to inspire young people in some fields, such as astronomy, space engineering, etc.			x
	Promote forms of dissemination of research, projects, products and services to the general society.		x	
Countries leaders in space technologies	Create mechanisms for qualification of suppliers, mainly to ensure autonomy in strategic technologies.			x
	Make efforts for creating/setting legislation that allow more efficient means for contracting the development of innovative and complex products and services.			x
	Expand the prospective activities of the Institute, to define new projects and new technologies to be explored and developed.		x	
	Expand the relationship with countries leaders in space technologies to present the predominately peaceful characteristics of space activities in Brazil.		x	

these functions according to the priority with which they should be addressed.

Finally, in conclusion to the exercise, after mapping the functions that the system/organization must perform to meet the needs/expectations of its stakeholders and after evaluating the level of implementation and prioritisation of each of these functions within the organization, an action plan for the system/organisation may be developed.

CONCLUSIONS

In this article, an application of stakeholder analysis to the Brazilian satellite space program has been proposed and

exemplified through an exercise. In the exercise developed in the article, stakeholders were identified from a careful scrutinising of the legal framework of the Brazilian space program. Subsequently, the proposed methodology has been applied to the design and planning of functions to be performed by a system/organization in the space sector, in order to better attend the needs and expectations its stakeholders.

The exercise showed that the proposed methodology seems to be feasible and may allow institutional gains by expanding the vision of the system/organization, such as to include the external actors interacting with the system/organization. This expanded vision of the system/organisation has then been shown to have the potential of being used as

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animportant basis for the definition of functions to be performed by the system/organization, in order to best attend the expectations and needs of the identified categories of stakeholders.

The exercise also demonstrated the feasibility of identifying and meeting the needs and expectations of the stakeholders of public institutions, taking the legal framework, inside which the public institution is defined, as a basis for the identification of the different categories of stakeholders.

As a final conclusion, we remark that the stakeholder analysis might be a powerful tool for an institution whose operation relies on a large number of internal and external actors, such as skilled human resources, leading suppliers, and major financial investment.

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