Project Management and Stakeholder Analysis. An Ethical Approach for Infrastructure Development Projects

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Abstract
Transport infrastructure development represents a major priority for Romania in context of a significant need for modernization, and the financing of this type of projects gets a new dimension due to the latest structural funds accessibility. But, the problem of infrastructure’s creating and rehabilitating can’t be carried out starting only from the barely political declaration or public administration wishes. As well as other public or private activity, the projects belonging to this category must to take into consideration a complex range of entities which are involved or affected by the project’s activities. These entities represent the so-called „stakeholders”, which, like in private business case, could be identified and assessed for the „public business”, too.

This paper aims three objectives: (i) to identify those stakeholder’s definitions and taxonomies which are appropriate for infrastructure’s development projects; (ii) to identify the real stakeholders for such of projects, and (iii) to assess the features’ intensity for this stakeholders, according to Mitchel – Agle – Wood – Driscoll – Starik model. In this way, the paper will purpose a model for quantizing of stakeholders’ involvement and affection, which could be a basis for the assessing of entire costs and socio-economic benefits system for the infrastructure’s development projects.

Keywords: stakeholder analysis, transport infrastructure, project management

1 The stakeholder concept in ethics and management

The stakeholder concept appeared and developed in the last four decades, being used for the first time in a rapport of Stanford Research Institute [1], as representing „those groups with out the support of which the organizations will stop to exist”. In the broadest sense, the stakeholder theory has as object of study the nature of the relationships between organization and all those groups that are affected by its decisions or whose
decisions can influence the evolution of the organization. The processes that dominate these relationships are studied, but also the effects determined by these relationships in both ways: towards the organization and toward the stakeholders. Managers are placed in the middle of this relationship [2].

Stakeholder theory views the organizations as a collection of internal and external groups (e.g., shareholders, employees, customers, suppliers, creditors, and neighboring communities). A major theme of stakeholder theory is the nature of the relationships between the firm (typically represented by its top managers) and stakeholders, whose interests often diverge considerably not only from those of the organizations, but also from each other. Early stakeholder theorizing was marked by some conceptual confusion, but Donaldson & Preston three-part taxonomy - normative (how should the firm relate to its stakeholders?), instrumental (what happens if the firm relates to its stakeholders in certain ways?), and descriptive (how does the firm relate to its stakeholders?) - helped focus and clarify much stakeholder thinking. The normative questions are particularly important because they differentiate stakeholder theory from other prominent theories in organization science, such as resource dependence, managerial cognition, and institutional theories [3, 4]

The definitions given over time to stakeholders vary from some very broad ones, to narrow ones, focalized exclusives. Definitions from the first category are prescriptive-normative or descriptive, emphasizing the public character of the relationship organization–stakeholders and having pronounced moral connotations. From these perspective, stakeholders are all those groups or all those individuals that can significantly affect the activity of the organization or that are significantly affected by [5, 6], and by extension can be included also non-human categories, as for example the [7]. The focalized, “narrow” definitions include or exclude categories of stakeholders using the criteria of the instrumental-managerial perception regarding the power of the stakeholders, the dependence of the organization to these or the risk liberated by the relationship with them. [8,9]. In business organizations, the maximizations of the wealth of the shareholders (owners) is, typically, considered to be the zero rank priority of the relationship organization–stakeholders [10], being even exclusive [11]. For preventing the „excessive complications”, conventional managerial theories encourage managers to limit the number of stakeholders, focalizing to financial aspects [9]. These points of view, with a pronounced positivist – individualist character, were widely called in question. In the context of economy globalization and multiplication of economical, financial and political interdependences, this kind of approach can not totally find its arguments, being proposed a wider model. A larger number of business
men, but also researchers, argue that a company can not act strictly only in the interest of its shareholders. Amartya Sen, for example, considers that the economical positivism, expressed in a radical way by Friedman, can no longer describes in satisfactory manner the reality, from where can occur the danger of its failure. According to her point of view[12], of the economical humanism, the motivational- behavioral universe of some individuals is a lot more varied than the one theorized by the economical positivism, and the non- egoistic aspects from the motivational structure must be reconsidered from three main reasons: (i) ethical aspects of the motivational mechanism are excluded in an unjustified manner by the economical positivism; (ii) real people take in consideration purposes of ethical nature, not only of economic nature; (iii) taking in consideration of the purposes of ethic nature combined with economic ones, can stay at the base of developing an adequate economic behavior. Economical humanism identifies as a major error of the economical positivism the fact that it only takes in consideration the interests of business owners, being equivalent with treating all interested factors as simple means for acquiring the purposes of the owners. Even more, this kind of point of view is correct inside some public organizations.

On the same ethical coordinates, from a perspective of the normative ethics, the stakeholder theory analyses the nature of their interests starting from a mix formed by risks, owning rights and moral aspects. For example, it can be considered that managers of an organization should get involved in a mutual relationship of a supporting type with its stakeholders because this fact is „moral” and „right”, existing a „social contract” between the organization and the society, and the „stakeholders are identified through the actual or potential harms and benefits that they experience or anticipate experiencing as a result of the firm’s actions or inactions” [3]. This definition, imprecise in a certain manner, [13] was subsequently resumed by Mitchell, Agle and Wood, who attempted to address the lack of previous definitions by specifying theoretically „who or what really counts” as a stakeholder in management thinking [14]. The three authors developed a model for characterizing the stakeholders based on three attributes: power to influence the firm, legitimacy of a relationship and/or urgency of a claim. Later on, as a consequence to the growth of the community and environmental impact of the actions of some organizations, the model was reviewed and completed with a fourth characteristic, respectively proximity, as a spatial and temporal attribute [15]. In section II it will be presented the extended four – dimensional model, and in sections III and IV the model will be adapted for evaluating the stakeholder’s characteristics for infrastructural projects.
2 Stakeholders features: power, legitimacy, urgency, and proximity

2.1 Power

"Power" could be seen as the more or less unilateral ability (real or perceived) or potential to bring about significant change, usually in people’s lives, through the actions of oneself or of others. J K Galbraith summarizes the types of power as being "Condign" or “Coercive” (based on force), "Compensatory" or “Utilitarian” (through the use of various resources) or "Conditioned" (the result of persuasion), and their sources as "Personality" (individuals), "Property" (their material resources) and "Organizational" [16].

An important part of the classical managerial theories accentuates the role of the power in the decisional process, joining thus ethical utilitarian theories (power meaning, among others, obtaining important results with minimal efforts, therefore efficiency) and agreeing with the settlement of certain economic and social relationships based on dependence (i.e. hierarchical organizational structures). In this way, an important part of analysis models of the stakeholders are concentric to the managerial perception regarding the power that stakeholders have, these being identified and classified on this base [8,15,17]. Starting here, an instrumental perspective was contoured, stakeholders being those individuals or groups who are in mutually dependence or exchange relationship with the firm [18].

The ones who explained the attribute of power inside the theory of stakeholders were Mitchell, Agle şi Wood, applying, in fact, the theories of Etzioni [19] and Galbraith regarding the fundamentals of power in organizations. Thus, a stakeholder can have and use the coercion power (force or threat), material – utilitarian (incentives or penalties) or normative (administrative or symbolic) for imposing its will in the relationship with the organization. Most of the following analysis and applications of the model consider the power under its social aspect, the stakeholders being considered as social actors, and the obligations of the organization, others than the economical ones, are regarded as being of social nature. This way of defining the relationships based on power between stakeholders and organization, even if exceeds by far the framework of financial utilitarianism, maintain a social – agency perspective for explaining stakeholder salience. In other words, „an entity may possess power to impose its will upon a firm, but unless it is aware of its power and willing to exercise it on the firm, it is not a stakeholder with high salience to managers” [14]. Even more, taking in consideration these aspects it can be
argued that the social power of a stakeholder is based on the economic exchange, it being greater if the relationships asymmetry or systemic inequalities are more significant. Being of a social nature, power, in the vision of Mitchel et al., can be hold only by human entities (groups or individuals). An overtone of this type of the definition of power allows the extension of the attribute even on some non-human entities, so that the environment can be considered as exerting a certain amount of power upon organizations. Although, obviously, the concept of „desire” in the meaning of the above definition has no significance in these case, natural environment holds a coercive and of a utilitarian type of power upon the organization as shown by numerous examples of its significant influence on economic or social activities [15]. The storms, floods, earthquakes, droughts show that the natural environment holds coercive power over organizations. The impact of the loss of the workplaces in mining industry due to the depletion of resources shows that the natural environment has utilitarian power over organizations. The natural environment supplies „critical resources” to the organizations, even if it does not participate, in a classical meaning, at the relations of economic, therefore could be consider, in some circumstances a powerful stakeholder.

2.2 Legitimacy

The concept of „legitimacy” is extremely debated in the juridical, philosophical, sociological or economic-managerial literature, having countless definitions. According to Suchmann [20], the character of legitimacy is multifaceted, and will operate differently in different context. For example, in a political context, the legitimacy refers in general to the peoples' acceptance of a law, ruling, or a regime itself as valid. The economical and managerial point of view comprises both strategic and moral bases for legitimacy. Extending to stakeholder theory, the contractual relationships (based on legal, moral or ownership rights) or exchange – based relationships in which those own the resources supply „critical resources” to the organizations determines the legitimacy of expressing some expectancies or demands [2, 21]. Thus, for being a legitimate stakeholder, a party must hold important resources (such as labor, money and loyalty) available to firm [9]. These approaches, pragmatic – utilitarian, focuses on the self – interested calculations of an organizations most immediate audiences and has been referred to as „exchange legitimacy” or „influence legitimacy” [20]. Moral legitimacy, on the other hand, is based on a normative, principled approval and the rightness or wrongness of organizational actions [15, 22].
In many managerial theories, the legitimacy is coupled, associated with the power (agent theory, behavioral theories, and transaction costs theory). Although Mitchel et al. argue that the two are independent variables, in prioritizing the stakeholders, the managers evaluate the interaction of the two attributes. Even if managers view some stakeholders as legitimate even though they have no power, these stakeholders won’t be as important as the ones that hold both attributes or that express urgent demands (as shown below). In other words, „legitimacy gain rights through power” [14]. Therewith, legitimacy can be associated with risk, saw by some authors [8] as a primary basis for stakeholder legitimacy.

As in the case of power, the debate can be extended by taking in consideration of some non – humane entities. The connections between the deterioration of the natural environment and the intensity of human activities can not be denied. For instance, global climate changes has been associated with carbon emissions from industrial or transport activities; affectation of the biodiversity is an effect of oceans pollution, massive cuts of woods or high dimension infrastructure projects. In treating the stakeholders legitimacy managers yet show a striking anthropocentrism, reporting them self at economic criteria (production, input, financial risks) and less to ecological ones. But, along with the growth of public pressure, the natural environment gets most frequent in the category of legitimate stakeholders. For instance, even in the case of incomplete legal rights, increasing attention to animal protection can be seen as an evolution in the relationships between human and non – humans. Thus, the nature of legitimacy tends to change under an eco – sustainability perspective, as evidenced by the increased number of legal and moral claims made on behalf of the natural environment. Management theory and practice focus on moral depiction of legitimacy, which are grounded in broader cultural and ecological values. As human individuals develop ever numerous and complex relationship with the non – human natural environment, more human organizations will also begin to explicitly recognize the stakeholder status for non –human nature.

2.3 Urgency

Urgency of decision or intervention refers to a measure of how quickly a decision or intervention must be made to resolve an issue. It has a different content depending on the time horizon in which their effects are expected and is a determinant of the amount of time that can be given to a collaborative process such as social or economic relationships. Urgency can be influenced by factors such as threat of resources’ unavailability, political agendas, and administrative calendars.
Urgency, as an attribute of the stakeholders, can be defined as a demand of those for immediate attention. Can be characterized by time sensitivity: „degree to which managerial delay in attending to the claim is unacceptable to the stakeholder” and by the critical aspect: „the importance of the claim or the relationship to the stakeholder” [14].

Urgency has a social, economic and environmental connotation. Unfortunately, there is yet a different perception concerning urgency between the stakeholders and the managers of the organizations. The perception of the first ones regarding urgency is significantly determined by short time economic considerations as a consequence of the instruments, methods and indicators with which they operate and with which they measure their performance: cost – benefit analysis, rates of return or the variation of stock capitalization. From this perspective, the urgency is an essential attribute of shareholders. For reconfiguring this perception and for bringing the social and environmental aspects in the priority of the stakeholders, Mitchell et al. [14] considers that these should act with intelligence by coalitions, political or social actions. With all these desiderate, it can be argued that urgency, as legitimacy, gain rights through economic - or status - based power [15].

Adequate to this triplet of characteristics, it can be distinguish three classes of stakeholders, with seven categories:

A. The class of stakeholders with a single attribute, respective: (i) influential stakeholders, which hold only power, (ii) discretionary stakeholders, which hold only legitimacy, and (iii) demanding stakeholders, which issue only urgent demands;

B. The class of stakeholders with two attributes: (i) dominant stakeholders, characterized by power and legitimacy; (ii) discretionary stakeholders, which have legitimacy and expectances with high sensitivity to time; (iii) dangerous stakeholders, which have power and issue urgent demands;

C. The class of definitive stakeholderilor, which hold all the three care attributes.

2.4 Proximity

The tri – dimensional model for characterization of the stakeholders, focalized on power, legitimacy and urgency, created by Mitchell et al., was completed by Driscoll and Starik by taking in consideration of a fourth attribute: proximity. The necessity of positioning this attribute on the same level of importance with the other three is sustained by the fact that an interest in a relationship can derive from the spatial or temporal tangency of
actors that build and they are part of the respective relationship. Proximity or „the state, quality or fact of being near or next in space, time or order” [23] has a special importance both for business relationships and the interactions determined by projects of public or social interest, from domains like health, education, infrastructure. Taking in consideration the special component, proximity, as an attribute of a category of stakeholders, shows the fact that the organization shares with this category a certain physical area or that their operational areas are adjacent. From countries that share border, through business organizations whose headquarters are located in the same geographical area town or county, to individuals who are residential neighbors, their (inherent) spatial proximity contribute significantly to stakeholder relationships’ development [15]. From temporal considerate, proximity shows that the organization operates in parallel or immediately before or after the operations of its stakeholders (i.e. based on an order in an integrated chain, but delocalized, of production). Thus, it is obviously that the spatial and temporal nearness is one of the most important factors for stakeholder recognition and interaction. It can then be argued that the greater the proximity, the greater the likelihood of the development of stakeholder relationships, caeteris paribus. In addition to spatial proximity, organizations could be said to be proximate if they share the same or similar actions, markets, strategies or ideas, therefore being proximate to one another in terms of „field” or „domain” [24]. For example, firms in the same industry are accepted stakeholders of one another, especially if they are members of the same industry associations or unions. From the same point of view, the organizations’ suppliers or buyers could be seen as proximate stakeholders in their value chains. Thus, proximity may be associated with idea of relatedness or stakeholder networks [25], whose relevant mean is a set or system of interconnected stakeholders (i.e. an organizations’ stakeholders which also have stakeholders, and so on).

Some special, additional aspects, related to proximity must be taken in consideration: (i) proximity type ubiquity, which means that a stakeholder is multi-faceted as to be virtually omnipresent (i.e. the local community for a motorway project), (ii) proximity type affinity, which nominates the predisposition of the organization for establishing partnerships with a preferred group of stakeholders, from reasons of complementary missions, strategies, structures, resources or their members, (iii) proximity type appearance, respective an entity lies within the other entity, therefore they share a physical space, and (iv) proximity of the natural environment: since environmental nature surrounds all human business and activities and is the ultimate context in which all human organizations act, it is a qualified assertion that the nature is a
proximate stakeholder (i.e. the immediate local impacts produced by organizations that pollute or deplete local ecosystems) [15].

3 Project Stakeholder: Defining and Analyzing

Today, many different organizations have embraced the concept of projects as a mechanism for delivering change and transformation. A project is a unique venture with a beginning and end, conducted by people to meet established goals within parameters of cost, schedule and quality. Also, a project is a set of people and other resources temporarily assembled to reach a specified objective, normally with a fixed budget and with a fixed time period. Projects are generally associated with products or procedures that are being done for the first time or with known procedures that are being altered [26]. A project has dedicated resources, a single point of responsibilities, clear boundaries across which resources and deliverables move, limited duration, it is a one–off task and has objectives [27]. Key features of these assertions are that the a project has the following characteristics: (i) a project is a unique undertaking; each one will differ from every other in some respect, (ii) projects have specific objectives (or goals) to achieve; (iii) all projects have a life cycle with the following stages: definition, planning, organization, execution or implementation and closure; (iv) projects require resources; (v) projects have budgets; (vi) projects have schedules; (vi) projects require the effort of people, and (vii) measures of quality will apply [27].

Projects as temporary organizations are organizations in microcosm, on a human scale. Projects, like organizations, have purpose, structure, groups and teams, authority networks, culture, and stakeholders. The major difference between the two, however, is that projects is time–bounded whose structures may or may not reflect the strict used by the implementing or financing organizations. The project structure may reflect the combined efforts of multiple groups from different cultures using different organizational structures. The maturity of the organizations – in regards to its project management systems, culture, style, organizational structure will also influence the project’s structure and culture [28, 29].

Project relationships are those relationships that occur between the project manager and the projects stakeholders as well as those that occur among the project stakeholders themselves. This network, comprising all the relationships both within and around the project forms the project environment, or sphere of influence and support, on which a project depends for its existence and has to be managed [30].
Extending previous definition for “stakeholders”, the project stakeholders can be viewed as individuals and organizations that are actively involved in the project, or whose interests may be affected as a result of project execution or project completion. They may also exert influence over the project’s objectives and outcomes. The project management team must identify the stakeholders, determine their requirements and expectations, and, to the extent possible, manage their influence in relation to the requirements to ensure a successful project. Figure 1 illustrates the relationship between stakeholders and the project team.

Generally, the key stakeholders on every project include: (i) project manager - the person responsible for managing the project, (ii) customer/user - the person or organization that will use the project’s product; there may be multiple layers of customers; for example, the customers for a new soft can include those who prescribe it, the patients who take it and the insurers who pay for it; in some application areas, customer and user are synonymous, while in others, customer refers to the entity acquiring the project’s product and users are those who will directly utilize the project’s product; (iii) performing organization - the enterprise whose employees are most directly involved in doing the work of the project; (iv) project team members - the group that is performing the work of the project; (v) project management team - the members of the project team who are directly involved in project management activities; (vi) sponsor or suppliers of financial support- the person or group that provides the financial resources, in cash or in kind, for the project; (vii) Influencers - people or groups that are not directly related to the acquisition or use of the project’s product, but due to an individual’s position in the customer organization or performing organization, can influence, positively or negatively, the course of the project; (viii) Project Management Office (PMO) - the department or group that defines and maintains the standards of process, generally related to project management, within the organization; the PMO strives to standardize and introduce economies of repetition in the execution of projects; The PMO is the source of documentation, guidance and metrics on the practice of project management and execution; if it exists in the performing organization, the PMO can be a stakeholder if it has direct or indirect responsibility for the outcome of the project.
In addition to these key stakeholders, there are many different names and categories of project stakeholders, including internal and external, owners and investors, sellers and contractors, team members and their families, government agencies and media outlets, individual citizens, temporary or permanent lobbying organizations, and society-at-large. The naming or grouping of stakeholders is primarily an aid to identifying which individuals and organizations view themselves as stakeholders. Stakeholder roles and responsibilities can overlap, such as when an engineering firm provides financing for a plant that it is designing.

Stakeholders have varying levels of responsibility and authority when participating on a project and these can change over the course of the project’s life cycle. Their responsibility and authority range from occasional contributions in surveys and focus groups to full project sponsorship, which includes providing financial and political support. Stakeholders who ignore this responsibility can have a damaging impact on the project objectives. Likewise, project managers who ignore stakeholders can expect a damaging impact on project outcomes. Also, stakeholders may have a positive or negative influence on a project (figure 2). Positive stakeholders are those who would normally benefit from a successful outcome from the project, while negative stakeholders are those who see negative outcomes from the project’s success. For example, business leaders from a community that will benefit from an industrial expansion project may be positive stakeholders because they see economic benefit to the community from the project’s success. Conversely, environmental groups could be negative stakeholders if they view the project as doing harm to the environment. In the case of...
positive stakeholders, their interests are best served by helping the project succeed, for example, helping the project obtains the needed permits to proceed. The negative stakeholders’ interest would be better served by impeding the project’s progress by demanding more extensive environmental reviews. Negative stakeholders are often overlooked by the project team at the risk of failing to bring their projects to a successful end.

<table>
<thead>
<tr>
<th>Type of stakeholder</th>
<th>Positive influence</th>
<th>Negative influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer</td>
<td>Offers full cooperation. Sets consistent requirements. Makes timely decisions.</td>
<td>Lack of cooperation. Constantly changing requirements. Delays decisions. Fails to set priorities</td>
</tr>
<tr>
<td>Project team</td>
<td>Performs role as expected. Raises issues and problems as soon as needed.</td>
<td>Fails to perform role as expected. Communicates outside the chain of command. &quot;Not my problem&quot; attitude</td>
</tr>
<tr>
<td>Performing organization</td>
<td>Shows an interest in project quality. Stays informed on all project issues. Makes timely decisions.</td>
<td>Demonstrates obvious disinterest. Unwilling to hear all sides of an issue. Fails to respond to issues on a timely basis.</td>
</tr>
<tr>
<td>Sponsors</td>
<td>Provides consistent project support. Makes timely decisions.</td>
<td>Fails to support the project manager when needed. Shows a lack of interest in the project.</td>
</tr>
<tr>
<td>Influencers</td>
<td>Stays informed on the project even without an active role. Raises post-project issues according to established methods.</td>
<td>Bad mouths project for political motives. Fails to cooperate in post project activities.</td>
</tr>
</tbody>
</table>

Figure 2 Type of project’s stakeholder influence

While this list is certainly not all inclusive, it does illustrate the degrees to which individual stakeholders can influence ultimate project success. Under certain circumstances, stakeholder influence must be considered as a project risk. Considering political realities, some projects may not always be warmly welcome by all concerned. And, misinformation, negative comments and poor attitudes can quickly defeat a project, no matter how well planned the project may actually be. As such, when stakeholders are identified and analyzed, the allies must be separated from the adversaries, and relationship plans must be developed to deal with each in a positive way.
To address this variety of situations, two important aspects of managing the project environment are the identifying project stakeholders and understanding the directions of influence in which the project manager and team must operate to successfully realize the project. These directions of influence – forwards, backwards, upwards, downwards, inwards, outwards and sideward/s – are incorporated into the Stakeholder Network. Managing the forwards component involves anticipating and planning while the backwards component involves developing and maintaining appropriate monitoring and control systems, statistical records and explicit and implicit knowledge of others. Managing upwards involves building and maintaining robust relationships with those senior manager or researchers whose support is vital to maintain organizational commitment to the project. Managing downwards involves managing the project team, and inwards involves seeking feedback from stakeholders about project and project management matters as well as practitioner reflection and learning. Managing sideward involves managing project manager’s peers to ensure collaboration, rather than competition. Managing outwards involves addressing the needs and impacts of a large group of project’s external stakeholders, which are often external to the implementing organization (i.e. clients or customers of the implementing organization, users of the final services or solutions, the general public, taxpayers, action or lobby groups, public administration or even the families of team members) [31].

<table>
<thead>
<tr>
<th>Directions of influence</th>
<th>Stakeholders (area of interest)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forwards (resource planning, project schedules, plans and other documentation)</td>
<td>All stakeholder types</td>
</tr>
<tr>
<td>Backwards (monitoring process, lessons learned, estimation models)</td>
<td>All stakeholder types</td>
</tr>
<tr>
<td>Inwards (feedback from stakeholders about project)</td>
<td>Project manager</td>
</tr>
<tr>
<td>Outwards (external needs and impact)</td>
<td>External stakeholders</td>
</tr>
<tr>
<td>Downwards (building interpersonal relations)</td>
<td>Project team</td>
</tr>
<tr>
<td>Upwards (expertise)</td>
<td>Project owner, senior executive</td>
</tr>
<tr>
<td>Sidewards (collaboration)</td>
<td>Project manager’s peers</td>
</tr>
</tbody>
</table>

**Figure 3 Project manager influence**

The relationship with all these stakeholders is essential, its correct management being one of the important modalities for reducing the project’s risks and the incertitude.

First of all, project managers must understand the culture of the organization financing their project and the implementing organization
The culture of the project and culture of implementing or financing organization can differ: an organization’s culture is unique to that organization, and will be formed by many factors including the history, size, sector, leaderships and staff. The project’s culture will reflect the leadership style of the project manager, the structure of the project and the organizational culture of the performing organizations [31, 32]. But, project managers usually have little formal power over stakeholders outside the project organization. To be effective, they must develop ongoing relationships with project stakeholders, and in some cases, with potential stakeholders. Thus, they must focus on using appropriate aspects of personal power to influence others [33].

Effective communication is a vital component in the process of building and maintaining relationships, and is essential for maintaining the support and commitment of all stakeholders. Project success is linked to the robustness of the created relationships using effective, regular, planned and informal communication with all members of the project’s stakeholder network. Appropriate types of communication include meeting, reports, interpersonal discussions and formal presentations. Maintaining ongoing relationships in the form of active communication systems will also provide project managers with the necessary early warning systems they need to recognize the danger signals indicating the possible problems existing among senior stakeholders. These signals can take various forms, such as interfering in project’s activities without consultation, not providing support when needed, weak communication links caused by too many reporting level between the project manager and the senior stakeholder, and unfounded promises and commitments. These potentially risky situations need to be closely managed through targeted communication strategies [31, 34].

4 Infrastructure Projects’ Stakeholder.
Case Study: Structural Funds Project Financing in Romania

Local, regional or national infrastructure development represents a major priority for Romania in context of a significant need for modernization, and the financing of this type of projects gets new dimensions due to the latest structural funds accessibility.

But, the problem of infrastructure’s creating and rehabilitating (primary, reporting to the transport one) can’t be carried out starting only from the barely political declaration or public administration wishes. The development of projects financed by the structural instruments of the European Union included in the five sectoral programs and the regional one represents an opportunity but also a major responsibility of the interval 2007 – 2013.
From the five sectoral programs, the one afferent to the „Transport” sector will allow a significant development of the transport’s infrastructure, having established as a global strategic objective the promotion inside Romania of a transport system that allows a fast, efficient and in safety conditions of people and goods, at services of a quality corresponding to European standards, on national courses, and on routes inside Europe, between and inside regions of Europe (as a global objective). For achieving this objective, they were established the next domains for intervention, inside of which it will established the projects that will be financed: (i) the modernization and the development of road’s infrastructure; (ii) the modernization and the development of the rail way’s infrastructure; (iii) the modernization and the development of maritime and fluvial ports; (iv) the modernization and the development of the aerial transport’s infrastructure; (v) improvement of the safety of the traffic for all means of transport; (vi) minimizing the transport’s adverse effects on the environment; (vii) supporting the efficient management, the implementation, the auditing and the control of the „Transport” Sectoral Operational Program.

The development of projects from these domains can be, yet, affected by some threats or can impose certain constrains: the preparation of the projects and the feasibility studies as the matters concerning the acquisition of terrains require to much solving and implementation time; the non-availability or the insufficiency of national funds for the co-finance of the projects, that can determine the delay or even the abandonment of some of them; a lack of qualified resources and the inexistence of sufficient experimented contractors and suppliers in Romania for facing the development needs, this fact being able to generate higher costs; the transport’s infrastructure requires significant modernizations, attractive tariffs and a certain level of services for preventing the growth of intern transportation costs and for encouraging the perception of Romania as a route to Europe, more than a network for intern transportation; the services, the costs and the efficiency of the railway transport, both for passengers and goods must be improved for preventing the decline of the railway transport in the favor of the road transport; the growth of the efficiency of road transport by building of new highways and by applying of all the European Union’s laws for the road transport will increase the competition, will reduce the prices and will grow the efficiency making the inter-modal transport less attractive. There is a need for finding equilibrium between the development of main road and railway axis in Romania with the growth of accessibility to national routes and services, in conditions of limited available funds. The decrease of concretization possibilities of these threats or solving the liberated constrains can be realized if the network...
of stakeholders that are affected or that can be affected by the transport’s infrastructure projects is taken in consideration, in all stages of their life cycle.

Below, we propose a model of classification of the stakeholders, according to the classic model based on the attributes of power – legitimacy – urgency – proximity. The model consists in the exhaustive listing of stakeholders, the quantification of each attribute on a Likert scale from 1 to 5, the determination of a total score for each stakeholder (considering the equal-important attributes) and representing the network of stakeholders.

<table>
<thead>
<tr>
<th>Type of stakeholder</th>
<th>Attribute</th>
<th>Influence score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Po</td>
<td>Le</td>
</tr>
<tr>
<td>European Commission (EC)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Management and/or Implementing Authority (MIA)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Central Administration (CA)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Local Administration (LA)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Local contractors and suppliers (LCP)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Financial investors (FI)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Local communities (LC)</td>
<td>x</td>
<td>X</td>
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<tr>
<td>Natural Environment (NE)</td>
<td>x</td>
<td>X</td>
</tr>
<tr>
<td>Business/Industry (BI)</td>
<td>x</td>
<td>X</td>
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<tr>
<td>Non-Governmental Organizations (NGO)</td>
<td>x</td>
<td>X</td>
</tr>
</tbody>
</table>

**Figure 4** The classification of the stakeholders of transport’s infrastructure projects depending on power, urgency, legitimacy and proximity

*European Commission* – the organism that decides the funds allocations and approves the objectives of the sectoral operational program (unidirectional influence, primary positive)

*The management and implementation authorities* – Transport Ministry and Intermediary Organisms (bidirectional positive influence, possibly negative in the case of the postponement of the implementation period).
Central Administration – The Govern, that will exploit the transport’s infrastructure networks (bidirectional positive influence, possibly negative in the case of non-assurance of co-funding of the national programs)

Local Administration – County or local councils that will develop projects or in the area of jurisdiction of which projects will be developed or that will administrate transport’s infrastructure networks created (bidirectional positive influence, possibly negative in the case of non-assurance of co-funding of the local programs)

Local Contractors and Suppliers – Economic and institutional actors that will offer workings, services and products in the implementation phase of the project (bidirectional positive influence, possibly negative in the case of non-honoring the supplying contracts or breaching the law of public acquisitions);

Financial Investors – financial or non – financial institutions that participate at assuring the co-finance (unidirectional positive influence, possibly negative in the case of high co-finance costs);

Local communities – the communities on the habitat of which the infrastructure projects will take place (including the persons that will be expropriated) (bidirectional influence positive, possibly negative in the case of opposition to expropriation);

Natural environment – the relief, the fauna and the flora affected by the development of projects (unidirectional influence, predominant negative, mostly during the development of the investment);

Business/industry – the economic domains that will be affected by the implantation and the exploitation of projects (unidirectional positive influence, possibly negative for agriculture);

Non – governmental organizations – organizations of the civil society, ecologist or humans rights protection; can be local, national or transnational (unidirectional influence negative, of opposition, possibly positive in the case of lobby groups).

Based on this list and the proposed scores, it can be built a model of the stakeholder’s network, in which the distance from the „nucleus”, respective the project its self is a measure of the score, and implicit of the level of influence and impact.
In construction of the model there were taken in consideration the four attributes of the Mitchell – Agle – Wood – Driscoll – Starik Model. The list of stakeholders is generic, and the quantification of the value of each attribute could be estimated on empirical criteria. A quantitative estimation can be realized by interviewing, which will constitute the theme of a future project.

The above model is priory applicable for road transport’s infrastructure projects, but it can extend for others types of infrastructure (utilities, development-research, environment etc.), in urban or rural areas. This model is useful for countering a long term impact of the project (showed in the effects on natural environment, of development of certain economic sectors on horizontal or vertical), but also for quantifying the possible negative influences of certain stakeholders on the project.
References


[34] D. Boddy, D. Buchanan, \textit{Take the lead: Interpersonal skills for project managers} (Prentice Hall, New York, 1999)