Management of infrastructure projects for hospitals in Romania

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Final Report

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Romair Consulting ltd. in association with Romtens Foundation

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ACRONYMS

Acronym	Definition
CC	District Council
DG Regio	Directorate General for Regional Policy
DPHD	District Public Health Directorate
DRG	Diagnostic Related Groups
OECD	Organization for Economic Co-operation and Development
EC	European Commission
ECH	Emergency County Hospital
ERH	Emergency Regional Hospitals
FS	Feasibility Study
GD	Government Decision
GDP	Gross Domestic Product
LPA	Local Public Authorities
MAI	Ministry of Administration and Interior
MAROP/AMPOR	Managing Authority for the Regional Operational Program
MoH/MH	Ministry of Health
MRDH	Ministry of Regional Development and Housing
NHIH	National Health Insurance House
RDA	Regional Development Agency
PPP	Public Private Partnership
RHA	Regional Health Administration
RE	Real Estate
ROP	Regional Operational Program
SNSPMS	National School of Public Health and Health Services Management
WHO	World Health Organziation
WB	World Bank

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I. EXECUTIVE SUMMARY

In Romania there are 409 hospitals, of which the ones benefiting in the last 20 years of infrastructure rehabilitation could be countered on fingers hands. In 2002, the real estate ownership for 369 hospitals was transferred from State to Local Public Authorities, aiming to improve the hospitals infrastructure by bringing in a new donor. However, this goal is still far from arrival. It seems as the institutional reform needs further strengths. This report intends to be a guide for the decision factors and stakeholders by framing out the hospital infrastructure situation as well as making suggestions to improve it.

The report is the outcome of the project "Management of infrastructure projects for hospitals in Romania", launched by DG – Regio of European Commission and being implemented by a consortium consisting in Romair Consulting ltd and Romtens Foundation.

The project focused upon the following objectives:

1. To assess the institutional framework (at central and local level) and the overall project cycle, from the initial decision on establishing public health institutions and services to the running of assets, and including financial mechanisms;

2. To assess the capacity of hospitals managers to efficiently manage complex investments projects, and accordingly manage investment and operating budgets;

3. To assess the potential role of the hospitals managers in the hospital infrastructure projects;

4. To issue detailed and tailored recommendations to overcome the possible difficulties or weaknesses arising from the preliminary assessments and a subsequent detailed action plan with clear deadlines.

Whereas the top three objectives were reached within the intermediate reports, the present final report aims the fourth objective, where in the view of the facts, cases, difficulties and the weaknesses previously arisen and analyzed, the hospital infrastructure process is now outlined and framed out into a synthetic and recommendation format.

The information which completes the study was collected by using several means, listed in the following:

i. A quantitative survey among a panel of 41 hospitals' managers[1], interviewed through a questionnaire applied face-to-face or sent via e-mail / fax. The topics approached have been: the hospital infrastructure projects recently developed, the managers' role within the infrastructure projects implemented by LPA, the relationship between managers and LPA as well as their knowledge, attitudes and practices over the investment processes
ii. A qualitative survey, including face-to-face interviews with 7 hospital managers, 3 representatives of LPAs and 3 representatives of DPHDs. The discussions tackled issues as: the managers' training, the management contract, the managers' role within the infrastructure projects implemented by LPA, the relationship between managers and LPA as well as their knowledge, attitudes and practices over the investment processes.
iii. Seven study cases of hospital infrastructure projects, emphasizing the encountered problems, the solutions taken and the lessons learned out of.
iv. Discussions with MRDH representatives and evaluators of ROP applications for Axis 3.1.

The assessment over the managers' capacity and roles in administrating complex hospital infrastructure projects must start with the answer to the following question: Is it their task, the management of such an investment?

The next key questions are: Should the managers be involved or not within infrastructure projects? If yes, do they have the required capacities to run the infrastructure projects? The answers are given or suggested in the report, yet as it may be noticed the implementation of the answers requires political commitment.

One is imposed a substantive note: in analyzing the managers' roles within the infrastructure projects, there must be differentiated among the managers of the 40 national hospitals (where the real estate ownership is on MH part) and the 367 hospitals where the real estate is on LPAs side. Whilst for the first, the respective roles are clear enough - they administrate the projects – for the second category these roles are rather blurred, LPA playing a key role. Both categories signs the same

[1] *For a simplicity reading scope, the term "managers" should be assimilated with "hospitals' managers", along the report.*

management contract, yet the roles are perceived being different. The report emphasizes the case of the managers in hospitals where real estate is under LPA ownership.

It is important to underline one of the key responsibilities of the health system is to translate health needs into services and to translate these services into appropriate facilities. However, this is not an easy task. The context the capital investment takes place is complex and constantly changing. The rapid pace of change means that health facilities must be able to respond rapidly to changing expectations and needs and to new opportunities offered by innovations in technology and configurations of care.

Although service and capital development plans and initiatives may be concurrent, capital support on the ground will inevitably lag behind service initiatives and often dictates the pace with which service change can be achieved.
Nevertheless, three basic messages have to be taken into account when speaking about hospital infrastructure. These are:

a. First, hospitals exist to improve the health of the population, a task they fulfill not only by providing health care that responds to the needs and expectations of their patients, but also through teaching and research.
b. Second, hospitals are only one element of a health care system. They cannot be considered in isolation from each other or from the health and social care provided in other settings.
c. Third, improving health and providing responsive and appropriate care are a shared responsibility involving both hospitals and those responsible for the wider health care system

I.1. **The hospitals' infrastructure framework** is outlined in a synthesis, below, underlining the process of an infrastructure project by presenting the status of the present and the proposed conditions in regards to the hospital real estate ownership, medical services management, funding sources, contracts administrator, hospital manager's role as well as major malfunctions for the actual situation and risks for the proposed one.

Present status

Real Estate ownership	Public Local Authority : County or Local Council	
Management	MH ⇨ DPHD ⇨ Hospital's manager	
Funding sources	Contract administrator	Manager's role
LPA	LPA	Initiate the investment; assist in design
MH	H / LPA	Initiate the project; Ensure the funds; Obtain funding approvals; Assist in design; Delegate certain specific tasks to the relevant hospitals' departments.
ROP Axis 3.1.	LPA	None or limited;
WB	LPA / H	Initiate; Assist in design;
Major malfunctions	❖ The management contract doesn't have any straight provision on managing the infrastructure projects and this fact determined a part of the managers to consider this is not their task. ❖ The minimal role of the manager within the infrastructure projects even though there is an administration contract between LPA and hospital, in which the latest is the administrator of the real estate belonging to LPAs. Its pr ❖ Intrusion of LPA in the hospital activities with or without any previous announcement; ❖ The managers' role within the infrastructure projects depends on the funding source or on the donor's perception on who is entitled to run the projects. According with the administration contract the hospital is the single one entitled, being the real estate administrator.	

Proposed framework

<table>
<tr><td>Real Estate ownership</td><td colspan="2">Public Local Authority : County or Local Council</td></tr>
<tr><td>Management</td><td colspan="2">LPA ⇨ DPHD ⇨ Hospital's manager</td></tr>
<tr><td>Funding sources</td><td>Contract administrator</td><td>Manager's role</td></tr>
<tr><td>LPA

MH

(only entitled with certain national program)

ROP Axis 3.1.

WB</td><td>Partnership

{ LPA + hospital }</td><td>▪ Project's Initiation;
▪ Funds identification;
▪ Assistance in design;
▪ Approve the technical solution;
▪ Approves and signs any contract in the project;
▪ Controls the works.
▪ Signs the acceptance of works.</td></tr>
<tr><td>Risks</td><td colspan="2">❖ Lack of cooperation in certain localities;
❖ Hospitals' capacities shortage and the present habits may not support the implementation of a partnership but keeping on transferring the project's management toward the LPA.
❖ Unless regulated it is unlikely certain LPAs would give up to contract alone.
❖ Lack of LPA's experience in implementing hospital infrastructure projects</td></tr>
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I.2. Facts and cases

I.2.1. Context for investments in hospital infrastructure. Health infrastructure has to work and to provide answers for the population health service needs. One of the conclusions of the study refers to the fact that most times, the context in which health care facilities operate is very volatile, rapidly changing and this situation happens not only in Romania but also all over the world.

Requirements determined by the structure of the health system. Health system in Romania has undergone fundamental changes over time, in an attempt to keep up with changes in society. Thus, most hospitals buildings in Romania were built in the early 70s, being developed to work in a national health system where the financing is made exclusively by the government. Existing infrastructure of health services is reflecting the vision of the health system during that period. Today, the hospital must adapt infrastructure requirements at increasingly higher medical services standards, especially epidemiology and infection control, and in medical technology, also. The life cycle of buildings used in the hospital sector mentioned in scientific literature is about 30-40 years and the investment in this sector in Romania, in the last 20 years, were not meaningful; therefore many hospital buildings are outdated at this point. Starting from this point of view, the real problem is to make the right decision in terms of upgrading existing buildings or building new buildings that meet the current demands, evidently considering the resources available.

Requirements due to demographic changes and morbidity. Another important point that influences the demand for hospital services, and therefore the hospital infrastructure, is represented by the demographic changes. Thus, ageing population and increasing life expectancy have a direct effect on the demand for hospital services, being well known that, often, more than half of the load of patients of a hospital is determined by the elder patients. Also, changes of the pattern of the morbidity may affect hospital system, because the morbidity picture is dominated by chronic diseases that require many health cares over a long period of time. In this picture we must add the problem of co-morbidity, a current problem for aged population, because the elderly are affected by several diseases that require special health care, and the hospitals must provide all the health care needed. Other threats are projected in the future and the hospital system must face them, including by infrastructure changes - from lifestyle changes (poor and fast food alimentation, high prevalence of tobacco and alcohol consumers) to the climate change, pollution threats and the emergence of new epidemics and pandemics.

*Requirements due to changes in medical technology.*Over time, the benefits of changes in medical technology brought change to the way hospital infrastructures were constructed, adapted and developed. It is known that the need to have in place a number of services and entities (e.g. laboratories, radiology departments) leads to a tendency to have mammoth hospital structure; this generates savings by grouping specialties. At European level, the evolution has led to another current model, a model that brings hospitals / health centers to smaller communities - that cover basic health needs - together with specialized centers, large health centers, where are concentrated specialized resources with high levels of expertise and multidisciplinary approach. The trends in medicine in recent years (using minimally invasive surgical techniques, etiogenic treatments, the use of new diagnostic technologies) will impact the use of hospital infrastructure. Romania is taking the first steps in the field of electronic patient registration (filing and foldering) and increasing the use of information technology, but it is not yet known how this will impact on hospital structure.

Requirements due to human resources in the hospital system. It can be stated the human resources in healthcare is " the blood" of the health system. Data on the number of practician physicians in the Romanian health system show a lower situation compared with other countries, with 215.8 physicians per 100,000 inhabitants in Romania compared to 317.1 physicians per 100 000 inhabitants in the EU 27 average. More than half of the total number of physicians in Romania are working in the hospital sector, similar with the situation in countries like Bulgaria, Portugal and significantly different from France, for example.

To this state of affairs in Romania, add an uneven distribution by areas: urban / rural, and even by regions; this data depicts an image of insufficient human resources. This problem was encountered by the consultant even in the field, e.g. in the case of county hospitals (previously considered as very attractive to the human resources in the county) where managers face shortages of medical specialists.

While data from other European countries led us to a picture in which most physicians are not working in the hospital and most nurses are, in Romania most part of the doctors and most part of the nurses are working in hospitals, suggesting mainly a lack of other job opportunities in the health care system, and a preference of the health professionals for the hospital work, explicable in the health system in Romania, where existing (financial, technical) resources in the system were for long time assigned to the hospitals.

Under these circumstances, knowing, as much as possible, and respecting the opinion of human resources working in the infrastructure sector which conduct their professional life is vital. When deciding to invest in hospital infrastructure it must be taken into account that the staff are the ones that spend most of their life time surrounded by that infrastructure, and therefore their view must not be neglected. A project that will take into account the important requirements of the staff has much better chances of success, being on the other side also a way to decrease resistance to organizational change. The way a hospital is designed can bring improvements in the quality of medical care (e.g. decrease in time loss for moving between strictly necessary sections / services).

I.2.2. Hospital beds' number and infrastructure. The reduction of the indicator "number of hospital beds / 1,000 inhabitants" represents a political objective assumed by the last governments, targeting 4.3 (in 2014) vs. 5.85 in 2007[2]. This current level is considered a burden and the committed one is a challenge for the health system reform. The purposed indicator cannot be reached unless major changes occur in the entire health system, mainly, by developing preventive medical care.

However, against other EU countries, the present level it is not an extreme in the overall context, the Romanian indicator is not worse than other countries, except for Scandinavian ones, where clime, disease incidence and customs in health care might be a reason for. In a political statement, in early April 2009, the minister of Health reiterated this issue, stressing the necessity to reduce the beds by comparing with EU 15 average.

On the other hand, there should be checked the occupation rate in communal and town hospitals; it is likely these types of hospitals to be under-occupied and patients' behavior pushes for reducing the beds under the following major motive: they go for hospital treatment in big hospitals, because of both better qualified medical care as well as modern technology. Therefore, it is questionable if the under-occupied should be financed on beds-wise.

[2] *Source: Ministry of Health*

The change in the bed number has an impact over the strategy regarding the future investments in the hospitals' infrastructure. On the statements level, the present government has adopted the main investments' objectives of the previous government. In early April 2009, a political statement was issued by the minister of Health, pointing out the continuation of the new hospitals construction but confining for the moment at only 15 hospitals, of which 7 emergency regional and 8 emergency county. Even this reduced number is under question in the "present financial context" as the same statement underlines.

I.2.3. National Commission for the Accreditation of Hospitals. In order to have a health care system which functions based on quality standards it is absolutely necessary to have in place and to be functional the National Commission for Accreditation of Hospitals which will evaluate the overall ability of the hospitals to provide quality care and will look at facilities, staff, equipment, processes and health care outcomes. The institutional framework supposed the respective commission would be subordinated to the Prime-minister chancellery. Hospital performance information is not only an instrument to inform the general public and other stakeholders, but also a tool for improving the efficiency and quality of hospital care. The National Commission for Accreditation should compile quantitative, standardized and comparative information on hospital performance.

I.2.4. Characteristics of the health infrastructure budgets. Since 2002, when the 369 hospitals' real estate was transferred from State public property to Local Public Authorities, the Ministry of Health has reduced its budget for infrastructure in the respective hospitals, being assumed, the new owners would have fund this type of expense.

I.2.5. Capacity to apply for EU funds. The Regional Operation Program through Axis 3.1. provides funds for hospital infrastructure on two types of investments: one is for the modernization and equipment endowment of 15 County hospitals – pre-nominated in the application's guide – and the other one is addressed to out-patient sections in all the other hospitals but the 15 above, with the same destination, modernization and equipment endowment.

The applicant is the LPA, owner of the infrastructure and as for the hospital, the role is at minimum, being required to provide data regarding the patients.

Within 18 months since the launch of Axis 3.1. of ROP, there were submitted 27 applications for the out-patients sections; of which 2 were rejected in the evaluation phases. The applications for the rehabilitation of the nominated county hospitals are still in a process of re-analyzing the feasibility studies. In regards to the out-patient departments of the hospitals, the applications submitted by June 2009 amounted 61.6 million euro. Looking at the regions the applications came from, it is obvious, that in certain regions one has been taken more action in supporting the applications for hospitals. Thus, in SE region, definitely, it may be considered a better collaboration among the stakeholders: LPAs, hospitals and RDAs. On the opposite pole are the regions Muntenia South and Bucharest-Ilfov, which haven't submitted any application, at all.

Certain dysfunctions require further actions to be taken*:*

- *The lack of an action for informing the hospitals with respect to the existence of ROP grants.*
- *The inutility – in the current period –of the Feasibility Studies for the 15 county hospitals.*
- *Lack of collaboration between the Ministry of Health – County Councils – MAROP regarding the fund accession under Axis 3.1.*
- *ROP – Axis 3.1. - Incertitude over projects ownership.*

I.2.6. The framework of granting funds for hospitals' infrastructure. The criteria used by both the Ministry of Health and the County/ Local Councils in regards to allocation of funds for capital expenditures are not known. This lack of transparency and low predictability of the funds doesn't encourage the managers to launch infrastructure projects and actually they don't know the criteria they should meet in order to be entitled to receive infrastructure funds.

I.2.7. Risks of compromising the investments in infrastructure. The delay of the investments in public hospitals determines the appearance of the following risks:

- *Migration of the medical staff* especially the highly trained one, in other countries, in big cities or in the private sector;
- *Migration of patients* to well trained doctors located in big cities or in the private sector;
- *Increasing competition of private hospitals.* The possibility of obtaining from HIHs of a discount for the medical services provided by the private hospitals creates a good premise for the development of this kind of hospitals.

Not being able to provide better conditions within the public hospitals due to poor infrastructure may lead to a migration of the medical staff and of the patients to the private hospitals. Two such cases are relevant, the "Pelican" Hospital from Oradea (where many doctors from ECH Bihor and patients moved – October 2008) and the Private Center for Hemodialysis in Botosani that left without any patient or medical staff the hemodialysis unit from the county hospital Botosani, leading to its dissolution.

I.2.8. Hospital Management Training provided by SNSPMS. Filling a position as a hospital manager, it requires the attendance of management courses organized by National School of Public Health and Health Services Management (SNSPMS – Romanian abbreviation). The program aims to provide know-how in the field of hospital management for staff with higher education, that are interested in this field and to provide training for hospital managers allowing them to manage hospitals at a top level. Topics include issues: management and health services organization, health economics, financial management, Funding Based on DRG system, human resources management, quality management in health services and audit.

The general approach is to memorize notions more or less relevant to the managers' current position rather than training for solving a current problem the managers face with. The course strategy is mainly focused on theoretical approach and less on efforts designed to build and develop skills. The trainer does not really practice management or a related discipline being relatively remote from hospital life.

Interactive methods introduced partial in the courses are difficult to be implemented unless the general teaching style is not shift completely toward interaction. Presently, the establishment of working groups and students' reluctance to interaction stand for two major obstacles. The trainers do not motivate participation but also because most students hold important positions or expect to and therefore their prestige reaction is quite high.

The hospitals do not network with other hospitals and there has been not noticed a concern, way of thinking, to interact transparently, sharing both achievements and failures. Considering that they are competing, they would think it a risky statement to disclose a mistake or to emphasize solutions.
In developing a teaching module, there is no practice to invite colleagues from institutes, hospital doctors or people with predominantly administrative positions of other institutions.

To manage the hospital infrastructure projects is not clearly addressed in any of the 7 modules. As such, this theme's components (defining hospital investment, funding procedures, funding sources, investment bases) are neither directly nor indirectly tackled. Moreover, Hospital Management Course does not include a project management module.

I.2.9. Management contract is concluded between Ministry of Health and the hospital manager, being regulated through Order No. 922/2006 of the Ministry of Health. The contract refers to the organization and management activities of the public hospital, set up indicators and targets involved in project management, in order to provide medical services and other services based on equity, necessity, effectiveness, quality and efficiency principles. The Management Contract is signed for a period of 3 years, while an annual contract compliance evaluation and of the contained indicators is performed.

In the contract there are not direct references on the infrastructure projects administration but approvals for investment lists. Regardless the key role the LPAs fill in the hospital infrastructure, there is no mention about LPA over the contract. This lack of provisions has, certainly, an impact over the managers and are the best pictured in a manager's statement: "I cannot deal with the infrastructure projects, as this is not a task in my contract".

I.2.10. Managers' capacity to run infrastructure projects is relatively low; the consultant analyzed several factors constituting this capacity:

a) *Infrastructure achievements* – considerably lacking as of low funding or institutional dysfunctions;
b) *Motivation in launching projects* – is rather low, being appraised in the view of: money incentives (none), preserve the position (low), notoriety (high, but the bias toward notoriety it is rare), compulsoriness (high), the project duration (determines low motivation), LPA involvement (determines low motivation).
c) *Energy* – rather high, being assessed in the view of average age of the managers, gender, background and regions (as a mentality factor).
d) *Knowledge of the business* – it is assumed as being is high as more than 75% of the present managers are doctors;
e) *Experience* in running infrastructure project is low since in the last decades almost no complex infrastructure; moreover, in the last two years, 25% of the managers being replaced.

f) *Project management know-how* – generally, there is not in place a project management framework; the project process is split out among the departments, usually the administrative department leading the process. Often, the LPA takes over the major part: contract the works.
g) *Financial knowledge* – is not a managers' strengthen, the budget development and monitoring being left with the financial department.
h) *Technical knowledge* - is qualified as being quite low being envisaged the overall knowledge and information on general trends and general characteristics of.

Within the panel survey, the great majority of managers - 81 % - haven't administrated, in any respect, projects over 1 million euro; moreover, 1/3 of the projects are less than euro 100,000. No project finished over 5 mil euro. These data are relevant in the context of administrating projects valuing much more than the managers are used with. For instance, the initial feasibility studies for hospitals rehabilitation are worth at least 100 mil euro.

I.2.11. Human resources. Inside the hospitals, only the manager is the one who is evaluated and could miss his position in case of non-performance in keeping with his management contract; all the rest are defended by the Labor Code. Consequently, there is no surprise the survey indicated the managers consider the second major problem in administrating an infrastructure project is "the inadequate human resources", being after the expected "insufficient funding". In completing this opinion, few DPHD representatives mentioned the ballast staff within hospitals and the need of a team around the manager in order to succeed in his projects.

The manager has almost no chances to replace the inadequate staff. Therefore, their most important recommendation made for their colleagues in order to properly administrate an infrastructure project is "find a consultancy company", which stands for 22% of total recommendations made in the survey. Externalize the expertise is one of the solution they may have to find it in settling the problem they have with the inadequate personnel.

I.2.12. The institutional communication is absent, deficient, un-matured, it lacks standards and standardized procedures. This fact determines two major consequences:

a. The managers don't interact with the specialized bodies in an institutional context or in the view of some institutional roles, but with certain persons (presidents of County Councils, mayors, their deputies) which become communication partners relying on interpersonal relationships and over communicational circuits more or less informal;

b. As a surrogate solution, the information through mass-media is an alternative for institutional communication – not quite blaming, but risibly: accidental, insufficient and with no durable effects.

The institutional communication between hospitals and LPA departments created with this scope is not functional. In this context, one can notice that:

- The managers' bias for direct communication with the hierarchical tops of public administration doesn't seem to have any relation with the type of the hospital they lead;
- Conversely, the managers' preference for "top communication" can be explained through the ownership of the real estate;

I.2.13. Administration contract. In 2002, the Hospitals Real Estate was transferred from State ownership to LPAs through several Government Decisions. Afterwards, an administration contract emerged between each hospital and the respective LPA, which practically, is the legal document which links the medical services of the hospital to the buildings where these services are provided. The contract doesn't have a common format, but institutes the right of hospital to administrate the buildings and the land, respectively.

In the contracts the consultant obtained, there is no direct provision on who is entitled to administrate the infrastructure projects

In legal terms, the objective of an administration contract is different from a rental contract. Thus, the hospital shouldn't be considered a renter, the hospital is the administrator of the buildings, meaning, no project is done without its agreement and

all the projects should be managed by the administrator. A provision in one of this contractor says: "The owner would do not undertake anything to hamper the hospital's activity." Cases as the one in ECH Braila, where the CC came over the hospital with a project by no previous warning, shouldn't have produced as it didn't have any legal endorsement.

The consultant noticed the provisions of this document are not known among stakeholders and definitely not enforced; it is an appendix: "Maybe it is useful in something, but we don't know to what." would be a thought any stakeholder in infrastructure projects has, either it is a donor, owner, regulator or a hospital.

I.2.14. Manager's roles. The hospital administration is juggled among Ministry of Health, Local Public Authorities and the hospital management. Within this institutional framework, the manager holds the intermediary role between MH and LPA. Both these institutions are supposed to support the infrastructure investments in the hospitals, however, the limits of what their competences on investments is not clearly defined. Either one funds the capital expenses but it is not assigned what kind of investments is for MH and what for LPA; as a consequence, both funding institutions ends either in collaboration for supporting certain investments or waits for the other one to launch the projects. *The collaboration is determined by the managers acting in both directions to acquire funds for their hospitals.* The managers' role in initiating and identifying the potential sources for a project is major. When the managers are not involved, then the coordination between MH and LPAs vanishes away and various problems may occur. An example in this way is the ROP. The MH was supposed to contract the FS for 15 hospitals. For softer process of the program, it may be a need the managers to be largely involved in the management of a project trough ROP since they have already played a role in coordinating the two institutions in the interest of the hospitals.

Presently, the general view indicates that within an infrastructure project, the managers are mostly involved on investment needs assessment, funds identification and obtain the funding approvals. It is a common practice in administrating the infrastructure projects by LPAs, which came over a gap of clarifications in this region corroborated with a lower capacity of managers to run such projects.

Within the survey, it prevails a certain recommendation made by the managers and by LPAs representatives: *"Ensure the LPA support"*. The conclusion would be that in order to have investments in the hospital a manager cannot rely on LPA unless "softens" the relations with LPA representatives.

A clear difference between LPAs hospitals and national hospitals emerge when it is about infrastructure project's management. Whereas, for the national hospitals, the projects are clearly administrated by managers, in the LPAs ones the administration of the projects were turned / taken over by LPAs with or without managers' agreement.

The hospital is largely perceived as a renter of the LPA, even though there is concluded a contract between the LPA and the hospital which confers the role of an administrator the hospital has. Under this role, any project must be administrated by hospital. However, this contract is largely unknown by various stakeholders and much least applied.

II. ASSESSMENT OF LEGAL AND INSTITUTIONAL FRAMEWORK FOR HOSPITAL INFRASTRUCTURE PROJECTS

II.1.1. Health care units. The health care is provided through (a) ambulatory medical units of family doctors and other specialists, diagnosis and treatment centers, policlinics, health centers, laboratories and other units; these units are known as the Primary health care providers and presently are not responsible to the DPHDs but solely to the District Health Insurance Houses through their annual contracts; (b) public and private health units with beds, as: hospitals, preventoria, sanatoria and institutes. The number of health care units in 2007, by organizational criteria is presented in the table no 1, below.

Table no. 1 – Health care units - 2008

Category / ownership	Hospitals	Medical offices and dispensaries	Medical-social units	Preventoria, Sanatoria, health centers	Labs	Diagnosis treatment centers	Ambulatories, Policlinics
Public	425	15105	66	62	2042	7	416
Private	22	18231	0	1	2412	20	250
Total	447	33336	66	63	4454	27	666

Source: National Institute of Statistics

Family doctor's office is specialized in providing primary medical assistance, being the first contact of a patient within the health system. Primary care physicians are known as "family doctors" and are considered somehow private practitioners. They are paid through a contract which takes into account a mix of capitation and fee for service installments. *Ambulatories* / *Polyclinics* provide diagnosis and treatment, being organized by medical specialties. Specialists working in ambulatory care are being paid by the DHIDs through a fee for service system. *Medical-social units* are public institutions subordinated to local public authorities, which provide care services, medical services as well as social services for persons with medical-social needs. *Sanatorium* is the health unit with beds which ensures medical assistance by using natural healing factors associated with other procedures ant therapeutically means. *Preventorium* is the health unit with beds which ensures the prevention and fighting off the tuberculosis. Health centers are provided with beds and ensure specialized medical assistance (at least 2 medical specialties) for the population of more localities.

II.1.2. Hospitals classification and numbers. The hospital is the health medical care unit provided with beds, of public utility and offers medical services. The law 95/2006 specifies[3] that other medical units with beds are still considered hospitals: medical institutes and centers, sanatoria, preventoria, health centers and social-medical assistance units. The average number of hospitals has kept on around 420 in the last decade, being registered 426 in 2007, in accordance with National Institute of Statistics. Yet if considered as hospitals all the medical units with beds as mentioned, then the number of hospitals reaches 494[4].

The classification of hospitals is made under the following criteria in the law 95 / 2006:

- Territory: Regional, County, Local (municipal, town, communal);
- Pathology: General, Emergency, Specialty, Chronically disease;
- Property status: Public, Private, Public with private sections;
- Medical research: Clinical with university departments, Institutes.

Regarding the property of real estate, the public hospitals are classified in (i) property owned by Ministry of Health, (ii) property owned by County Councils and (iii) property of Local Councils.
The management subordination split up the hospitals directly to (i) Ministry of Health, (ii) District Public Health Directorates or lately, to Local Councils.

The reduction of the indicator number of hospital beds / 1,000 inhabitants represents a political objective assumed by last governments, targeting 4.3 (in 2014) vs. 5.85 in 2007[5]. This present level is considered a burden and the committed one a challenge for health system reform. The purposed indicator cannot be reached unless major changes occur in the entire health system, mainly, by developing preventive medical care. Against other EU countries, the present level it is not an extreme in the overall context, as being noticed below, Table 2. Romania indicator is not worse than other countries, except for Scandinavian ones, where clime, disease incidence and customs in health care might be in place. In a political statement, in early April 2009, the minister of Health reiterated this issue, stressing the necessity to reduce the beds by comparing with EU 15 average.

Table 2, Number of hospital beds / 1,000 inhabitants in several EU states - 2006

Romania	Belgium	Germany	France	Sweden	Denmark	Hungary	Czech rep.
6.47	6.72	8.29	7.18	2.87	3.61	7.92	8.17

Source: Eurostat

II.1.3. Hospitals real estate. In 2002, the real estate (land and buildings) of 183 hospitals was transferred from State ownership and Ministry of Health administration to County councils as well as to Bucharest local councils[6]; Moreover, the real estate of a number of 218 hospitals[7] was transferred from State ownership to the local councils they are located at. In State ownership remained 40 hospitals[8] which are directly under the subordination of Ministry of Health and are considered of national importance. Since that transfer, for the respective hospitals, County/Local councils are in charge with the investments consisting in buildings (repairs, rehabilitation) and building equipment. The county local councils cannot change the destination of those hospitals but with Ministry of Health and Ministry of Interior approvals. Table no 3, below, shows the number of hospitals in terms of their real estate ownership. Ministry of Health issued in April 2009 a report where 411 hospitals where evaluated; the buildings of these hospitals are in a number of 3,077, of which 1,429 are buildings where are

[3] *Art 172 (2)*
[4] *See Annex III*
[5] *Source: Ministry of Health*
[6] *GD 867/2002 and 1096/2002*
[7] *GD 866 / 2002*
[8] *GD 1106 / 2002*

located units with beds and 1,648 other medical or non-medical units. Of the total number of buildings 239 don't have the real estate ownership clarified.

Table no. 3. Public Hospitals real estate ownership

Owner	*Number of hospital*	*Legal act entitled*
State (MH administration)	40	GD 1106 / 2002
County Councils	123	GD 867 / 2002
Local Councils	218	GD 866 / 2002
Bucharest Local Councils	31	GD 1096 /2002
TOTAL	409	

Note: There are considered only the units whose name are "hospitals" or "institutes"

II.1.4. Institutions with roles in hospitals' infrastructure and funding. The health care system reform has been pursued since 1990. The roles of the institutions involved has been onto an ongoing changing, presently a decentralization process emerges, which would mean another change for the institutional framework of the health system. Particularly, for hospitals' investments there are outlined down the roles of the respective institutions.

Parliament – has a key position in the policy making process, for the public health system as well. Its role is being fulfilled by the Health Commissions, being one in each of the chambers of the Parliament. The Parliament has a *policy role* by approving the legislation regarding the health investments and policies according, and a *funding role* by approving the health budget, where infrastructure chapter is included as well as approving any other adjustment in the overall health infrastructure budget;

Presidency - The president is the most visible figure on the current political scene and it is also holding a limited number of attributes in terms of crafting legislation; presently, at the Presidency level there is established the Presidential Commission for the analysis and elaboration of public health policies for Romania. The Presidency has an advisory role; its established health commission drawn up a report in 2008, where there is stated: …" currently, the criteria for resources' allocation, especially for investments, are unclear at the level of the responsible authorities. There are no publicly stated elements and criteria which are being used for the allocation of funds".

Prime Minister - National Commission for the Accreditation of Hospitals - Under the coordination of the prime minister is to operate the National Commission for the Accreditation of Hospitals, which would have an important role in the modernization process of the hospitals' infrastructure;
The Commission's structure is regulated by the Governmental Decision 1048/2008. The representatives of Presidency, Government, Romanian Academy, Romanian College of Physicians, Romanian Order of Nursing will be nominated members of the Commission Coordinating Council. According to Government Decision no. 1048/2008 the hospitals accreditation procedures, standards and methodology are elaborated by the National Commission for Hospitals Accreditation in a term of 90 days since its constitution, but for now the Commission is not constituted.

Ministry of Health. In terms of *strategies, its role* is to draw up the health policies, strategies and action plans the hospitals' infrastructure being covered in as well as to decide over new hospitals construction, decides on transformation and hospitals restructuring as well as over beds reduction. MH has no involvement in the process of an infrastructure investment initiated and funded by a County/Local Council; Its *funding role* regards the approval of the hospitals' budgets, including investments chapters, the approval of the infrastructure investments and releases the payments for the investments made under its approval.

District Public Health Directorates – the 42 District Public Health Directorates (DPHD) are the representative bodies of the Ministry of Health at the district level; The DPHDs have the role to release the funds from Ministry of Health toward the hospitals which are not directly under Ministry of Health subordination. Moreover, the DPHDs monitor at local level, the investments done through Ministry of Health funds as well as to control the hospitals' managers performances;

Ministry of Public Finances (MPF) - This ministry plays a key role in health budget approval as well as the budget monitoring and its framing in the limits approved by Parliament.
County Councils / Local councils – The real estate of 401 hospitals was transferred in 2002 to County Councils / Local Councils of Bucharest. Thus, the investments on buildings and equipment for buildings (air conditioner, power heat system, elevators etc) are to be done by these councils. The County/Local Councils decides over the investments they would undergo with hospital's manager advice and proposal. Since December 20008, a one year pilot stage has begun by

transferring the administrative and financial management to County / Local councils; 18 hospitals in Bucharest and 4 in Oradea (Bihor county)are included in this stage.

In terms of *funding*, County/Local councils are the main the main funding source for infrastructure investments of these hospitals; also initiate and contract the investments done on the hospitals whose real estate belong to them; The County/ Local councils cover the expenses with the utilities in the hospitals where the real estate is under their property. County/Local councils are the promoter in the projects financed by ROP Axis 3.1.; they submit the application forms and manage the projects by establishing a project management unit.

No common organization has been noticed amongst the District/Local Councils regarding departments responsible for hospitals, even though the process of transfer of property from the Ministry of Health to them was initiated since 2002. In terms of level of interest of LPAs for the management and investments made in the hospitals for which they are responsible the situation is very uneven, with both high and low levels of interest. As for instance, the Local Council Sector 1 Bucharest has established for its 18 hospitals a special department (AFIUSP) with own regulations / procedures / by-laws; on the other side, a different District Council delegated all its responsibilities regarding hospitals' infrastructures, including investments, to the Public Health Directorate in its district.

Ministry of Regional Development and Housing – Management Authority of Regional Operation Program - Ministry of Regional Development and Housing through its Management Authority of Regional Operational Program Axis 3.1. manages and funds hospital infrastructure projects. Within this program it delegated more activities to Regional Development Agencies.

National Health Insurance House (NHIH) - The NHIH is a specialized public institution that sets the rules for the functioning of the social health insurance system. It ensures the payment of medical services and required materials (here a percentage of 5% of the contract may be allocated toward infrastructure maintenance). It doesn't participate directly in making decision process or funding of hospitals' infrastructure, but the operation of a new hospital infrastructure depends on available funds in NHIH for the related medical services. The payments are released through its 42 district health insurance houses (DHIH).

The Health Insurance House of Defense, Public Order, National Security and Judicial Authority (C.A.S.A.O.P.S.N.A.J.). The Insurance House is organized and functions according to the Law no. 95/2006 regarding the reform in the health domain and to the Government Ordinance no. 56/1998 regarding the establishment and functioning of C.A.S.A.O.P.S.N.A.J., approved with modifications and completions through Law no. 458/2001. C.A.S.A.O.P.S.N.A.J. applies and respects the general policy and strategy set up by the National Health Insurance House for the social health insurance system peculiar to the ministries and institutions with own health networks from the area of defense, public order, national security and judicial authority.

The Health Insurance House of the Ministry of Transports (HIHMT). The Health Insurance House of the Ministry of Transports applies and respects the general policy and strategy set up by the National Health Insurance House for the social health insurance system peculiar to the ministries and institutions with own health networks from the area of defense, public order, national security and judicial authority and from the Ministry of Transports network.

College of Physicians (CoPh). The CoPh has organizations both at district and national level. The CoPh has an influence over the content of the benefit package for the insured population, the type of reimbursement mechanisms in place for health service providers, which drugs are compensated and in what proportion, etc. At the same time, the CoPh has important responsibilities in areas concerning training and accreditation of physicians. In order to have the right to practice, all physicians should be registered with the District College of Physicians and pay a membership fee. Newly established medical practices should also be approved at the district level of the CoPh, in accordance with a set of criteria issued by the national level of CoPh.

Regional Development Agencies (RDAs) – are under contract with MRDH – MAROP to perform certain activities under ROP. Their role in the hospitals infrastructure is confined to ROP Axis 3.1. ; There are 8 RDAs, corresponding to each development region and their main responsibilities go to: provide assistance to applicants, receive and register the application forms, check the administrative and eligibility appraisals, organize the technical and financial appraisals, check the projects in place, submit to ROP MA the payments requests and monitor the projects' implementation.

Other institutions. Other institutions with competence in hospital matters include the Ministry of Labor, Family and Social Protection, under whose umbrella it has been organized the National House of Pensions and Other Social Insurance Rights, which is collecting the contributions of employers and employees pertaining to risk factors.
There are also the Ministry of Transport, the Ministry of Defense, the Ministry of Interior and Administrative Reform, the Ministry of Justice, and the Romanian Intelligence Agency, which all own and operate their own parallel health systems consisting of separate health care facilities.

The roles of the institutions - involved in an infrastructure project - are outlined in the figure no. 1, below. The infrastructure process is structured in three major layers: decision making, funding and implementation.
Decisions for hospitals infrastructure projects are made be Ministry of Health, County/Local councils and NHIH (for some maintenance works); all these decisions come on the requests of the hospitals. The second layer regards the required funds which come from Budgets of Ministry of Health, County/Local Councils and NHIH; each of these funding sources is involved in implementing the projects.

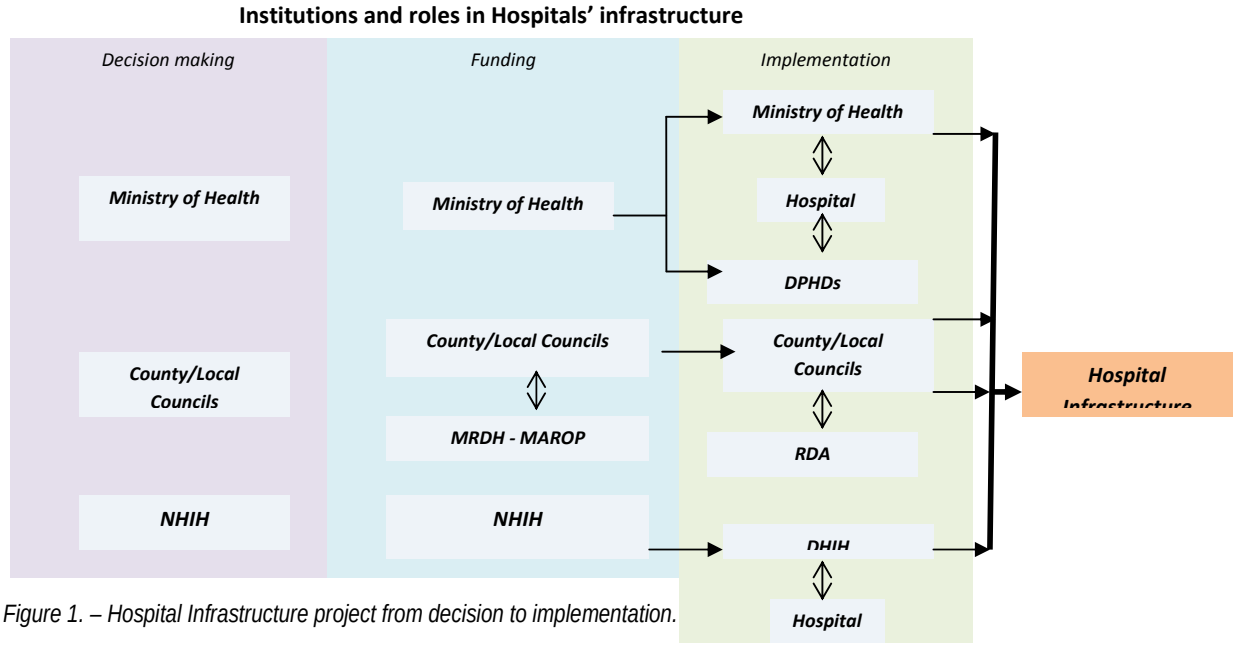

Figure 1. – Hospital Infrastructure project from decision to implementation.

II.1.5. National Strategy and Action Plan for Health System Reform - GD 1088 / 2004. The strategy includes nine core objectives with a specific attention being devoted to hospital services and their infrastructure, specifically mentioning:

a) The necessity to ensure an appropriate and sustainable funding to increase hospitals performance;

b) The process of closing, transformation or restructuring of the under-used or non-used hospitals;

c) The process of decentralization of financial and operational management;

Of these objectives, a noticeable progress has been witnessed in meeting the decentralization objective, an objective being for the moment in a "testing phase". Concerning the ensuring of appropriate funding, there has been progress for medical services performance improvement by introducing the DRG method which might be put under some efficiency question but still it is a start. However, concerning the infrastructure investments there are no recorded actions mentioned for it. The procedure used for assessing investments still requires clarifications from the Ministry of Health.

No clear follow-up actions have been foreseen for the closing, transformation or restructuring of the under-used or non-used hospitals. An Action Plan to implement the strategy is split out in three periods of time. The actions which would have an impact over the hospitals' infrastructure are classified on short, medium and long term, and are presented below:

Short term (end of 2004)

- *Transparent and efficient funding of hospitals by: monitoring the budget framing, extending the DRG system of funding hospitals for all acute hospitals, posting the financial reports of hospitals on line and the respective funding institutions;* Medical services' financing fulfills certain efficiency requirements through the DRG method, but concerning hospitals' infrastructure funding the data don't have the same transparency and efficiency. The amounts assigned for infrastructures, either from MoH budget or County Councils, look like a kind of random dispersal.

- *Investments finalization and ongoing monitoring.*

Medium term (up to 2008)

- *Treatment and diagnosis infrastructures' improvement.*

- *The continuation of hospital beds' reduction this process initiated in 2003 is planned to reach the threshold of 4,3 beds / 1,000 inhab in 2014.* The number of hospital beds pointed out a sharp downsize only in 2003, when there was a direct intervention which produced this decreased. Afterwards, the trend kept its slowly rhythm, so that in 2007 the coefficient value was standing at 5,85, against 6.27 in 2003. This rhythm shows no strategy in place to reach the level expressed in the strategy: 4.3 beds.
- *Implementation of financial mechanisms sustainable, reasonable and transparent based on financial responsibility;* The improvement of funding mechanisms is being noticed only for the delivery of medical services financing through DRG method, but there are no provisions for infrastructure funding.

- *Hospital restructuring based on health services' needs plan in accordance with required infrastructure, equipment, technology and personnel*; This objective needs a broader outline by explaining the way this restructuring should happen as well as its final scope.

Long Term:

- *Meet the strategy objective by reaching a national average of about 4.3 hospital beds / 1,000 inhab by 2014, through the implementation of a mix reduction to reduce the number of beds.*

- *Finalize all the health units restructure and reorganization and implementation of appropriate services based on population health needs.*

One's been felt the need for a statement behalf Ministry of Health regarding the status of objectives adopted in 2004 and / or the change occurred as well as a confirmation for keep on the same objectives.

II.1.6. Strategic Plan 2008 – 2010. Even though the Strategic Plan is not a legal document, it details the general lines outlined in the Ministry of Health Strategy enlisting the steps to be taken within 2008 – 2010. Relevant for the theme of this study are the following proposed objectives:

Construction of 28 hospitals (8 regional emergency and 20 county emergency)

By the moment the plan was issued, the MoH management stated that: *"there are being developed through a contract for developing pre-feasibility and feasibility studies, to design, build up and endow with medical equipment, a number of 8 emergency university hospitals and twenty county emergency ones. These studies have already been completed. The eight ones will be built in the socioeconomic regions, relying on human and physical resources found within the traditionally university centers."*

It seems like this initiative was temporarily abandoned as the required funds are no longer available. If one interprets the last statement of Mr. Irinel Popescu current president of the NHIH[9] : *„[...] the issue of regional hospitals project it's under scrutiny because it's likely that there are not enough money in the State budget this year for funding them."* it can easily understand that there are signals that there aren't simply enough resources for funding the medical services which would be delivered by those new hospitals. In 2008, for the Emergency Regional Hospital Iasi the investment process was few steps ahead, the constructor was selected and the contract is to be signed with a price close to the one calculated in the feasibility study as above; the timeframe for its construction is 48 months to be completed. At the beginning of 2009 the status of this contract was a blurry one.[10].

The initial plan for emergency county hospitals counted 20 hospitals of this type, but this decision was adjusted in 2008 by canceling one Emergency County Hospital (ECH) in Bucharest, thus only 19 hospitals of this type were to be built. It seems a huge financial effort might be needed, aprox 3,2 billion euro (plus ERH Bucharest), but at the end of the former Government the bet increase and there were approved additional 10 hospitals in Mures county[11]. Two of these Mures hospitals are already in the phase of signing the contract with the construction company. In the Table no 4, below, are shown the estimated amounts required for the new hospitals; in the annex IV there is posted a more comprehensive table.

[9] *www.Hotnews.ro , 22 Ian 2009*
[10] *See interpellation of the deputy Petru Movila – Iasi*
[11] *GD 1020, 1021, 1022, 1023, 1024, 1025, 1026, 1027, 1028, 1029, all issued in 2008*

Table no. 4 – Hospitals planned to be risen

No	Type	Investment Total Value (VAT included)	
		thou lei	Euro
8	Emergency Regional Hospitals	4,897,306	1,166,025,352
19	Emergency county hospitals	8,667,333	2,063,650,629
10	*Hospitals in Mures County*	1,071,213	255,050,715
37	TOTAL	14,635,852	3,484,726,696

Source: Ministry of Health

b). Rehabilitation of 15 Emergency County Hospitals

In the counties where no new hospitals would be risen the target is to rehabilitate the existing ones. There have been initiated feasibility studies to be completed in 2007. To develop these studies it was allocated the amount of 36.820 thousand lei.

The selected hospitals for rehabilitation are nominated in Regional Operation Program Axe 3.1., where the MoH is the institution to contract the required feasibility studies. Yet, some problems occurred with the works included in the Feasibility Studies (rehabilitation, demolition and new buildings) because they are not funded by ROP which focus only on modernization. Moreover, the amounts revealed by these studies broadly exceed the total ROP allocation. For instance, only the works at ECH Targoviste would require 140 mil euro and the total amount through ROP by 2013 is 173.588.779 euro.
Consequently, at this moment the funds for these 15 hospitals are blocked and it is expected a decision to be made on possible modifications to be performed to the already done feasibility studies in order to fit in ROP framework, so that to allow those 15 hospitals to access the funds.
A recent – early April 2009 - political statement of the minister of Health pointed out the continuation of the new hospitals construction but confining for the moment at only 15 hospitals, of which 7 emergency regional and 8 emergency county. Even this reduced number is under question in the "present financial context" as the same statement underlines.

II.1.7. Decentralization. First steps in health decentralization process were taken through the issuance of GD 866/2002, 867 / 2002, 1096 / 2002 and 1106/2002 when Ministry of Health transferred the property of real estate for 401 hospitals toward District Councils and Local Councils. The county councils cannot change the destination of those hospitals but with Ministry of Health and Ministry of Interior approvals.

The main objectives of the healthcare system decentralization, mentioned in the Action Plan of the Ministry of Health for 2008 – 2010, stipulate:

1. *Transfer of competences, tasks and responsibilities from the public health authorities to the local public administration.* Setting up a county institution that has competences regarding the administration and financing of the transferred activities, by taking over the specialists from the public health authorities;

2. *Transfer of the funds* allocated by the Ministry of Public Health for the socio-medical centers from the Ministry of Public Health budget to local public administration;

The Ministry of Health new management, by an official statement of the minister Ion Bazac, supports the continuation of the decentralization process, which was initiated by the previous governing:

*"We reconsidered the health directorates in such a manner so as to be completely new structures, with responsibilities which do fit to the current requirements. Thus, we have already prepared the decentralization premises, which (*nb: the decentralization*) I intent to accomplish until the end of this year. Within the new structure, PHD* ***will be transferred to the county councils****. I want to bring again the professionalism and consistency within the healthcare system".*

Following this transfer, through the GO no. 70/2002, it is regulated the way the expenses with utilities had by these hospitals are covered by County councils.
The next stage of this decentralization process is the transfer of the administrative and financial competences. Towards the end of the mandate, in November 2008, the previous government issued the GEO 162, by which the first steps of the transfer of administrative and financial competences were set. Before all the hospitals that are going to be included in the transfer program will have put into practice the provisions, the Ministry of Health has the responsibility to implement a pilot stage that will be performed during one year. These hospitals from the pilot stage were designated by GD no.1508 / 2008 and GD 1567 /2008, by which 18 hospitals from Bucharest and 4 hospitals from Oradea were nominated. The hospitals from Oradea had a special characteristic: the intention was to reorganize the 4 hospitals into one single hospital in order to

determine a higher efficiency. Public rows of the employees were organized and discontent of some managers of the four hospitals was expressed and thus at the beginning of January 2009, the new Minister repealed GD no.1508 /2008 by which the four hospitals were reorganized and issued a new decision, GD no.1716/2008, under which the four hospitals are kept in the pilot stage, but as distinctive centers.
Political actions and messages regarding the decentralization indicate a possible double subordination of the hospital managers, one to MH and the other one to the Local/County Council. Without a clear procedure, an institutional malfunctioning may arise and may create impediments in performing the investments.

2001	CC/LC ensures the necessary framework for providing the public services of local interest regarding health	L 215
2002	Transfer of the real estate ownership of hospitals from MH to LPA	GD 866, 867, 1096
2002	CC/LC provides the funds necessary for the utilities of the hospitals that had their buildings' ownership transferred	GO 70
2006	Promotion of healthcare reform by decentralization	L 95 / 2006, 195 / 2006
2008	The stages of transfer of the administrative and financial competences from MH to CC: Announcement of a pilot stage	GEO 162
2008	Nominalization of the hospitals from the pilot stage of competence transfer	GD 1508, GD 1567, GD 1716

Figure 2 The legislative stages of the decentralization process in health sector

II.1.8. Hospital manager. Roles. The hospital management is usually made up of an executive director, a medical director, assisted by accountants and legal advisors. No planning function is apparently established at either hospital or district level[12]. The hospital managers are mostly physicians' specialists whose decision making in what concerns the development of their hospital seems somehow biased toward their own professional area of interest (meaning their own medical specialty).

The hospital sector is strongly politicized because it is formed by the elite of the medical field and some of the members of these elite are decisional makers at all levels within the health system. (HIT, 2008)

The manager's responsibilities that are of interest for the process of investments in hospitals are the following:

- develops, based on the medical service needs of the population within the allocated area, the hospital development plan during the mandate, together with the other members of the steering committee and based on the proposals of the medical board;
- approves and monitors the execution of the annual plan of public acquisitions;
- approves the list of investments and of current and capital repairing works that are to be performed during a taxable year, in compliance with the law, according to the medical board and steering committee proposal, having the endorsement of public health directorate or of the Ministry of Health, according to the circumstances;
- approves the income and expenditure budget of the public hospital, with the agreement of the hierarchical superior credit chief accountant.

The hospital's manager is appointed by minister of Health after won the competition for the respective position. The manager' activity is yearly evaluated by DPHD in accordance with the performance indicators legally established.

There are performance indicators that cannot determine the managerial ability or cannot be quantified, as for instance:

- *Physicians' percentage out of the total staff* – there are areas where one can ascertain a migration of doctors towards more developed areas or abroad. How can a manager influence this fact?
- *The average waiting duration at the emergency room* – not all the hospitals have a monitoring system.
- *% capital expenses / Total expenses.* – currently, a manager cannot have a high influence upon the infrastructure funds from MH and LPA.

This kind of indicators leaves a higher degree of personal decision on the evaluator's side.

[12] *See Annex III for a hospital organizational chart*

III. ASSESSMENT OF THE OVERALL PROJECT CYCLE FOR HOSPITALS' INFRASTRUCTURES PROJECTS

III.1. Overall project cycle for hospitals' infrastructure projects

In accordance with the funding source there are specific steps required in addition to the already formal process of an infrastructure investment process. The technical-economic documentation required is framed out by the GD 28/2008, whose provisions are applied for all types of infrastructure investments.
This section describes the renewal of infrastructures' process irrespective of the type of funding (namely the Ministry of Health, the ROP Axis 3.1. or the District/Local Councils), however with more highlights casted over the funding provided through ROP – Axis 3.1[13].

II.1.1. Infrastructure project cycle. *Focus on ROP Axis 3.1.* An infrastructure project undergoes through several main stages: Identification, design, Appraisal, Financing, Implementation, Monitoring, and Evaluation. In order to identify the project focus point, the promoter needs to find out who should benefit and what their needs are. A 'needs assessment' will give an initial overview over the future investment. A 'capacity assessment' will help identify which problem the project should address.

Identification

The identification of projects represents the first step within the project cycle. This step itself consists of several actions, which are: (a) Preliminary review, (b) Assessment of the situation, (c) Socio – economic appraisal, (d) Identification of potential projects;

Preliminary review.

The nature of the problem and stakeholders' analysis

The analysis of a problem must take into consideration the stakeholders and their roles in designing a project. The stakeholders that must be involved, in accordance with the Romanian legislative framework and ROP Applicants' Guideline, are as following:

- District Council and Local Public Authorities: they are representatives of the administrative-territorial units responsible for initiating and implementing projects approved to be financed by Structural Founds.
- Hospital Managers: is a natural person or the delegate representative of a legal entity and it has attributions regarding hospital organizational structure and human resources; he establishes and approves the number of human resources, proposes organizational restructuring, reorganizing of the hospital to the MH through Local Public Health Directorates.
- Consultative Council of the Hospital: One of the key stakeholders that can play the role of the agent of change is the Consultative Council of the Hospital. It has the role to debate the main problems related to strategy, organizing and functioning of the hospital.
- District Public Health Authorities: they are public services belonging to the MH and having judicial personality that are enforcing locally the public health programs and policies. They must collaborate with the local public authorities for providing medical care at District level.
- The Ministry of Health: it is a body of the central public administration, the main authority in the area of public health care.
- National Commission for Hospitals Accreditation. The structure, attributions, functioning of the Commission is approved by the Government. The representatives of Presidency, Government, Romanian Academy, Romanian College of Physicians, Romanian Order of Nursing will be nominated members of this Commission. The Commission structure is regulated by the Governmental Decision 1048/2008.

Assessment of the situation

The Local Public Authority together with the public health representatives (hospital manager and public health authorities) can already have an idea of the current local needs; sometime the infrastructure problems are quite obvious, but the population needs' in terms of medical care must be defined and it is important to carry out a needs assessment before planning development work, even in the situation when it is thought that the problem is very well known. A needs assessment will give to promoters the opportunity to prioritize their needs, which leads to a much clearer understanding of the problem by both the public health and public authorities , and will contribute to the sustainability of the project development.

[13] *Annex VII provides a synthesis over an infrastructure investment through ROP - Axe 3.1.*

Socio – economic appraisal

The socio – economic assessment is intended to identify and examine the impacts of project development for different members of the community. The purpose of the analysis is to determine whether: the existing situation contributes to the well being and development of the population; the existing situation contributes to the well being and development of the economy; the existing situation is sustainable.

Identification of potential projects

This action usually has three components: (i) *Assessment of results, (ii) Stakeholders' priorities for development and (iii) Contributions of the stakeholders.*

Design

The sub-stages of the Project design stage are the following (taking in consideration the requirements from the Applicants' Guide for the Axis 3.1. from POR) : (a) Contracting and executing the Feasibility Studies, (b) Contracting and executing the cost benefit analysis, (c) Realizing the Hospital Activity Report,(d) Collecting all the needed permits,(e) Editing the financing application, (f) Assembling the file of the financing application,(g) Verifying the file of the financing application,(h) Submitting the file of the financing application.

Contracting and executing the Feasibility Studies

According to the GD (Government Decision) for the approval of the framework contents of the technical-economic documentation pertaining to the public investments, as well as to the structure and methodology of issuing the general specification for investment units and intervention works, is issued in the following stages: Technical evaluation, and if needed, energy audit, Approval documentation for the intervention works, Technical project and Execution details.

In the case of District hospitals, the documentation – under the form of feasibility study is contracted by the Ministry of Health. To the financing application will be annexed:

- The feasibility study approved by the Ministry of Health;
- The Decision of the respective District Council of appropriation of the feasibility study.

In the case of the ambulatory services, to the financing application will be annexed:

- The feasibility study based on Model D – Part I of the Financing Application Form if the acquisition procedure for the issuing of the feasibility study was launched before coming into effect of the GD for the approval of the frame contents of the technical-economic documentation pertaining to the public investments, as well as to the structure and methodology of issuing the general specification for investment units and intervention works.
- The documentation for the approval of the interventions works, made based on Model D – Part II of the Financing Application Form if the acquisition procedure for the issuing of the documentation was launched after the entering into effect of the GD for the approval of the frame contents of the technical-economic documentation pertaining to the public investments, as well as to the structure and methodology of issuing the general specification for investment units and intervention works.
- Both for hospitals as for the ambulatory services, when establishing the activities of the project the applicants need to take n consideration the provisions of the Order of the minister of public health no. 914/200614 in order for the rehabilitated unit to be able to obtain the sanitary authorization for functioning.
- The feasibility study / the documentation for approval of the intervention must not have been elaborated / revised / brought to date with more than 1 year before the date of submission of the Financing Application. The feasibility study / the documentation for approval of the intervention must be accompanied by the approval of the technical-economical Counsel and the decision of the local public administration authority of approval of it.

Contracting and executing the cost benefit analysis

In the case when the feasibility study does not include the cost-benefit analysis, this should be elaborated on the base of the instructions presented in the Applicants Guide that have as a base an Official Document of the European Commission. This cost-benefit analysis is mandatory for the Financing Application to respect the administrative conformity criteria.

[14] *Order no. 914 / 2006 for the approval of norms regarding the conditions to be met by a hospital in order to obtain sanitary functioning permit, OG no. 695/ 15.08.2006*

Assembling the Hospital Activity Report

This document is needed in order to the Financing Application to respect the administrative conformity criteria. This document must contain the performance indicators of the respective medical unit, according to the Order no. 112 from 2007 and to the Order no. 922 from 27 July 2006, which are stating performance indicators for the management of the public hospital – for hospitals.

Also it is needed to be included in this report an analysis of the average number of consultations / physicians in the ambulatory service.

The hospital manager is responsible to draw up these documents.

Collecting all the needed permits

In this stage the following approvals/decisions are needed: The urbanism certificate; The technical file regarding the conditions for environmental protection (where needed), in copy; The environmental impact evaluation study (where needed), in copy; The Decision of the Local Council / District Council / Local Councils of the sectors of the Bucharest Municipality / General Council of the Bucharest Municipality of approval of the project and of the expenses related to the project; The decision of the District Council to name the sanitary unit which is developing its activity in the building that will be subject to modernization, as administrator of the building.

The urbanism certificate is issued accordingly by: the presidents of the District councils, the general mayor of the Bucharest Municipality, the municipality mayors, the mayors of the sectors of the Bucharest municipality, of the cities and communes (art. 4 from Law 50 from 1991 republished with its subsequent modifications and additions). The validity term of this document is for a term between 6 to 24 months from the issuing date, term given to the applicant in order to be used for the purpose it was issued.

The technical file regarding the conditions for environmental protection. The forms of the technical files are made available to the applicants, for a fee, together with the urbanism certificate to be used in the design and preparation of the authorization phase. The technical file, annexed to the urbanism certificate, is filled in by a designer, on its own responsibility, with the data and technical elements resulted from the design, according with the requirements of the approver.

The request for issuing the *environment agreement*, accompanied by the technical file regarding the conditions for environmental protection (annex to the urbanism certificate), is submitted to the public authority for environmental protection in the area where the chosen location of the project is.

If within the urbanism certificate it is mentioned the need to provide a technical file regarding the conditions for environmental protection, according to the art. 16 from the Order of the minister of transportation, construction and tourism no. 1430/2005 regarding the approval of the Methodological Norms for the application of Law no. 50/ 1991 regarding the authorization of the execution of construction works (MO no. 825 bis/13.09.2005), this will be annexed to the financing application. The approval of the technical file is done in a term of 20 working days. The approval of the technical file will be done with the obligation to ask for and obtain the environment authorization in the moment of initiating the investment pertaining to the activities with low impact on the environment.

Appraisal

Project appraisal represents a crucial stage in the project cycle. The appraisal process has several steps. Furthermore we shall detail how one project is appraised taking into consideration the procedures used within programs financed from European funds with exemplifications from the Regional Operational Program.

From an institutional point of view the entity which is responsible for the national implementation of the Regional Operational Program is ROP Managing Authority (AMPOR).
The ROP MA delegates some tasks to the RDA (Regional Development Agencies) which are the Intermediary Bodies (IBs) in the territory.
As mentioned in previous steps, the project proposal is submitted by the Local Authority, owner of the hospital real estate.

Firstly, the project is submitted by its promoter to the financing/evaluation entity where it is registered under an unique number. After the Financial application (project proposal) is submitted the application is subject to appraisal. Project appraisal goes through: (a) Administrative appraisal, (b) Eligibility appraisal, (c) Technical and economical appraisal.

Financing (proposal, approval and contracting)

Writing proposals and securing approval and funding represent the fourth stage in the project cycle. The preceding stage confirms that the proposed project meets various financial, socio-economic, environmental and strategic criteria, and is worth developing.

Pre – contracting. If the project receives the positive notification following its appraisal, the applicant is notified about the pre – contracting procedure. Two main steps are preceding the final financing decision and consequently the contract closure: (a) site visit and (b) technical project: preparation, submission and appraisal of the technical design (technical details of the project proposal); submission of construction permit;

Monitoring

Monitoring considers the issue of whether the project goes correctly in terms of performing the desired activities, meeting the proposed deadlines and reaching the specific objectives.. Its purpose is to alert management to any problems that might arise during implementation. Monitoring works within the existing project design, focusing on the transformation of inputs and activities to outputs. It ensures that inputs are made available on time and are properly used. If any unexpected results are observed, their causes are noted and corrective action identified in order to bring a project back onto target.

Process monitoring reviews three main aspects of the project: (i) the physical delivery of structures and services provided by the project (activities); (ii) The use of structures and services by the target population (outputs); (iii) The management of financial resources.

Implementation

By signing the financing contract, the project promoter accepts all terms and conditions for receiving the funds. In the same time, the project beneficiary undertakes the responsibility of implementing the project using the resources as consigned in the project proposal.
The beneficiary of the project can request amendments to the contract provided the fact these are possible as well as justified. The main steps of the implementation are enumerated bellow: (a) Public procurement for execution of the project and contractual formalities with the constructor, (b) Execution: works and procurement of goods, (c) Payments, (d) Reporting, (e) Training of the personnel, (f) Reception of works, (g) Commissioning, (h) Follow – up. After project implementation all documents related to the project must be preserved in archive for 5 years from the official date of closing the Regional Operational Program. These documents are subject to audit either from Romanian authorities or from European Union representatives.
Evaluation

Evaluation is an "assessment, as systematic and objective as possible, of an ongoing or completed project, program or policy, its design, implementation and results. The aim is to determine the relevance and fulfillment of objectives, developmental efficiency, effectiveness, impact and sustainability. An evaluation should provide information that is credible and useful, enabling the incorporation of lessons learned into the decision-making process of both recipients and donors". An evaluation can be done during implementation ("mid-term"), at its end ("final evaluation") or afterwards ("ex post evaluation"), either to help steer the project or to draw lessons for future projects and programming. "Ex ante" evaluation refers to studies during the preparatory phases of the project cycle.

II.1.2. Infrastructure project cycle. Funding sources and Management subordination. Formally, either the funding source, an infrastructure project should follow the same major steps, yet some differences occur for hospitals domain in keeping with the funding source (MH, DC/LC) and hierarchical links, a hospital being, presently, subordinated in terms of management, either to MH or to DPHA. The tables no 5, 6 and 7 present a project cycle when the funding sources are provided either by Ministry of Health or DC / LC and it subordinated, directly, either to Ministry of Health or DPHA. The Annex VIII presents the same cycle in a Gantt graphic style.

Table no. 5 – Infrastructure project cycle – MH funds and management subordination

Decision making		Funding	Implementation
Ministry of Health		N/A	Budget approvals. MH approves entire budgets, where the proposed investments are included. AS the contract between Hospitals and NHIH is concluded around April, the hospital budget approved by MH it is done by May – June; yet the H knows within the first 3 months of the year in what terms the budget would be approved. The H can use the funds against a preliminary budget file. *Budget approved around May – June is very late; the H management doesn't have a clear picture over the availability of funds. The major cause of this delay it seems to be the late contract signed with NHIH.*
		N/A	Investments approvals. The investment documentation includes: SF, Justification note, PT and the approved budget.MH approves the investment and issues to H an investment fiche. *This step would be done around May-June which is very late to initiate an investment. Then, almost a half of the year it is a short period to launch the works in the same year.*
		MH budget	Payments release for construction works. Payments are done in keeping with the construction phases. *Practically, it happens the hospital to receive suddenly an important amount which must be spent by the end of the year; otherwise they may lose it. Consequently, a hospital needs to find out from informal sources what money might be available and must be prepared with the entire TE documentation, to save time and money.*
Hospital	Manager	N/A	Investment needs assessment. *It is done by November previous year.*
		N/A	Investment list. The list includes a technical paper. Done by November previous year. It is not sure what investments would be approved out of this list. *Usually, the investments are not included in the budgets, yet over the year the budget may be supplemented; the predictability of the funds is may be low.*
		Hospital funds	Contract the TE documentation. TE documentation includes: updating of the Expertise Report, SF, PT, CS, DDE, developed required surveys: geotechnical, land, hydro-geological;
		MH funds	Contract the construction works.
		N/A	Works reception. *The hospital staff may not have the appropriate qualification to receive the works.*
	Financial dpt.	N/A	Justification note. Each investment objective is described in, along with arguments.
		N/A	Budget development. It is outlined on its history and needs assessment. Done at the end of the previous investment year. Once the contract with NHIH is concluded, the budget is shaped down and its final form would be around May – June.
		N/A	Investment list submittal to MH - Budget dpt. Other documents go along: Justification note, calculus annexes, expertise report, and initial budget.
		N/A	Public acquisition procedure for the TE documentation.
		N/A	Investment documentation submitted to MH. This documentation includes: SF, Justification note, PT and the approved budget.
		N/A	Public acquisition procedure for the construction works. *Until the hospital receives the investment fiche from the MH, usually in order to save time, this procedure is already launched.*
	Admin / Tech dpt	H own funds	Obtain the Urban Certificate from the City Hall / County Council; Usually, it is valid for 1 year with an option for extension with one more years. Therefore, in case the investment is not accepted or fund in the respective year, it is required an updated UC.
		H own funds	Obtain the formally permits: electricity, gas, water and sewerage; obtaining the finally permits in the feasibility stage: electricity, gas, water, health, sanitary-veterinary, Romanian Water company permit, historical, environment and State Inspectorate for Construction permit. The required permits are specified in Urban certificate in each case.
		H. funds	Construction permit. It is made up PAC documentation in order to obtain the construction permit, which is required for: new construction, reconstruction, consolidation, modification, extension, changing of the destination of any kind of construction.
		N/A	Works reception.
		H own funds	Authorizations obtaining / renewals: environment, health and sanitary-veterinary (these authorizations are obtained before the activity starts in the respective construction and one is checked if the implementation of the measures stipulated in the related permits).
	Admin dpt coordinates a Consultant company	H. own funds	Expertise report. This document stands for the first estimation of the investment. This report is completed before the investment list. *It is paid by hospital but it is not known if the investment would be approved or not.* This report is 2 years valid.
		H. own funds	Develop the TE documentation. TE documentation includes: updating of the Expertise Report, SF, PT, CS, DDE; developed required surveys: geotechnical, land, hydro-geological; develop the documentation required to obtain the whole package of authorizations and permits.
		MH funds	Construction works supervision. The supervision could be done by other company than the one which develops the TE documentation.
	Admin dpt. coordinates the Constructor.	MH budget	Construction works. If the works exceeds December, then the bureaucratic process of approving again the investment list and appropriate budget needs to be resumed.

Table no. 6 – Infrastructure project cycle – MH funds and DPHA management subordination

Decision making		Funding	Implementation
District Public Health Authority (DPHA)		N/A	Budget approvals. DPHA initially approves and centralizes all budgets of the hospitals under its management. In the respective budgets the proposed investments are included. As the contract between Hospitals and NHIH is concluded around April, the hospital budget approved by DPHA it is done by May – June; yet the H knows within the first 3 months of the year in what terms the budget would be approved. The H can use the funds against a preliminary budget file. *Budget approved around May – June is very late; the H management doesn't have a clear picture over the availability of funds. The major cause of this delay it seems to be the late contract signed with NHIH.*
		N/A	Investments approvals. The investment documentation includes: SF, Justification note, PT and the approved budget. DPHA approves the investment and issues to H an investment fiche. *This step would be done around May-June which is very late to initiate an investment. Then, almost a half of the year it is a short period to launch the works in the same year.*
		DPHA	Payments release for construction works. Payments are done in keeping with the construction phases. *Practically, it happens the hospital to receive suddenly an important amount which must be spent by the end of the year; otherwise they may lose it. Consequently, a hospital needs to find out from informal sources what money might be available and must be prepared with the entire TE documentation, to save time and money.*
Hospital	Manager	N/A	Investment needs assessment. *It is done by November previous year.*
		N/A	Investment list. The list includes a technical paper. Done by November previous year. It is not sure what investments would be approved out of this list. *Usually, the investments are not included in the budgets, yet over the year the budget may be supplemented; the predictability of the funds is may be low.*
		Hospital funds	Contract the TE documentation. TE documentation includes: updating of the Expertise Report, SF, PT, CS, DDE, developed required surveys: geotechnical, land, hydro-geological;
		DPHA	Contract the construction works.
		N/A	Works reception. *The hospital staff may not have the appropriate qualification to receive the works.*
	Financial dpt.	N/A	Justification note. Each investment objective is described in, along with arguments.
		N/A	Budget development. It is outlined on its history and needs assessment. Done at the end of the previous investment year. Once the contract with NHIH is concluded, the budget is shaped down and its final form would be around May – June.
		N/A	Investment list submittal to DPHA- Budget dpt. Other documents go along: Justification note, calculus annexes, expertise report, and initial budget.
		N/A	Public acquisition procedure for the TE documentation.
		N/A	Investment documentation submitted to DPHA. This documentation includes: SF, Justification note, PT and the approved budget.
		N/A	Public acquisition procedure for the construction works. *Until the hospital receives the investment fiche from the DSP, usually in order to save time, this procedure is already launched.*
	Admin / Tech dpt	H own funds	Obtain the Urban Certificate from the City Hall / County Council; Usually, it is valid for 1 year with an option for extension with one more years. Therefore, in case the investment is not accepted or fund in the respective year, it is required an updated UC.
		H own funds	Obtain the formally permits: electricity, gas, water and sewerage; obtaining the finally permits in the feasibility stage: electricity, gas, water, health, sanitary-veterinary, Romanian Water company permit, historical, environment and State Inspectorate for Construction permit. The required permits are specified in Urban certificate in each case.
		H. funds	Construction permit. It is made up PAC documentation in order to obtain the construction permit, which is required for: new construction, reconstruction, consolidation, modification, extension, changing of the destination of any kind of construction.
		N/A	Works reception.
		H own funds	Authorizations obtaining / renewals: environment, health and sanitary-veterinary (these authorizations are obtained before the activity starts in the respective construction and one is checked if the implementation of the measures stipulated in the related permits).
	Admin dpt coordinates a Consultant company	H. own funds	Expertise report. This document stands for the first estimation of the investment. This report is completed before the investment list. *It is paid by hospital but it is not known if the investment would be approved or not.* This report is 2 years valid.
		H. own funds	Develop the TE documentation. TE documentation includes: updating of the Expertise Report, SF, PT, CS, DDE; developed required surveys: geotechnical, land, hydro-geological; develop the documentation required to obtain the whole package of authorizations and permits.
		MH funds	Construction works supervision. The supervision could be done by other company than the one which develops the TE documentation.
	Admin dpt. coordinates the Constructor.	MH budget	Construction works. If the works exceeds December, then the bureaucratic process of approving again the investment list and appropriate budget needs to be resumed.

Table no.7 – Infrastructure project cycle – DC / LC funds and DPHA subordination

Decision making			Funding	Implementation
District Council / Local Council (DC / LC)		Invest dpt.	N/A	Investment needs assessment. It is done along with the hospital management.
			N/A	Justification note. Each investment objective is described in, along with arguments.
			N/A	Public acquisition procedure for the TE documentation.
			N/A	Contract the TE documentation. TE documentation includes: updating of the Expertise Report, SF, PT, CS, DDE, developed required surveys: geotechnical, land, hydro-geological;
			DC / LC funds	Develop the TE documentation. TE documentation includes: updating of the Expertise Report, SF, PT, CS, DDE; developed required surveys: geotechnical, land, hydro-geological; develop the documentation required to obtain the whole package of authorizations and permits.
			N/A	Investment documentation submitted to Local Council Assembly. This documentation includes: SF, Justification note, PT and the approved budget.
			DC / LC funds	Obtain the Urban Certificate from the City Hall / County Council; Usually, it is valid for 1 year with an option for extension with one more years. Therefore, in case the investment is not accepted or fund in the respective year, it is required an updated UC.
			DC / LC funds	Obtain the formally permits: electricity, gas, water and sewerage; obtaining the finally permits in the feasibility stage: electricity, gas, water, health, sanitary-veterinary, Romanian Water company permit, historical, environment and State Inspectorate for Construction permit. The required permits are specified in Urban certificate in each case.
			DC / LC funds	Construction permit. It is made up PAC documentation in order to obtain the construction permit, which is required for: new construction, reconstruction, consolidation, modification, extension, changing of the destination of any kind of construction.
			N/A	Public acquisition procedure for the construction works.
			DC / LC funds	Construction works supervision. The supervision could be done by other company than the one which develops the TE documentation.
			DC / LC funds	Construction works.
		Financial dpt.	N/A	Budget development. It is outlined on its history and needs assessment. Done at the end of the previous investment year.
		Local council	N/A	Investments approvals. The investment documentation includes: SF, Justification note, PT and the approved budget.
		President / Mayor	N/A	Contract the construction works.
			DC / LC funds	Payments release for construction works. Payments are done in keeping with the construction phases.
Hospital	Manager		N/A	Investment needs assessment. *It is done by November previous year.*
			N/A	Works reception is done along with the representatives of DC / LC.
	Admin office		H own funds	Expertise report. This document stands for the first estimation of the investment. This report is completed before the investment list. The H may have this report already developed. *It is paid by hospital but it is not known if the investment would be approved or not.* This report is 2 years valid.
			H own funds	Authorizations obtaining / renewals: environment, health and sanitary-veterinary (these authorizations are obtained before the activity starts in the respective construction and one is checked if the implementation of the measures stipulated in the related permits).

The processes posted in the above tables show a significant difference in hospital involvement into such a project cycle. Thus, when the investment is done through the DC / LC funds the responsibilities of the hospital are at a minimum level and the major part of the tasks are taken over by the DC / LC. Moreover, in terms of cycle steps, there are less time consuming as many of the approvals steps are passed in the same institution.

Logical steps of an investment project through MH funds and under MH management:

a. *Investment needs assessment.* The hospital management along with units' and departments' chiefs identifies the investments needs assessment. Usually, it should be completed by late November previous investment year.
b. *Investment List.* Investment objectives and their values are included in a list. The list is developed by the financial director along with the Technical service director.

Auxiliary document: A technical paper is drawn up by the Technical Service and approved by Hospital manager.

c. *Substantiation Note.* Each objective subject of an investment is described down in the Substantiation Note, with arguments stating its necessity. An annex with a preliminary calculus is done, too. The Technical Service is in charge with these documents' completion.
d. *Expertise Report.* For each infrastructure (either an existing one or a future one) subject of investment an expertise report is drawn up. A specialized company is hired for this task by following the public acquisition procedures. This report stands for the first funds required estimation of the investment.
e. *Budget development.* At the end of the previous investment year is started the budget outline, based both on its history and needs assessment. Once the contract with NHIH is concluded, the budget is shaped down and its final form would be somewhere in May –June. However, in March the hospital gets a tentative budget file to start up the investments.
f. *Obtain the Urban Certificate.* In expecting the approvals, the Technical Service proceeds with obtaining the Urban Certificate from the City Hall.
g. *Contracting the technical – economic documentation.* Public acquisition procedures are launched for technical – economic documentation: Feasibility study, Technical design, Building ToR, detail design for execution. Usually, these services are paid out of the hospital own pocket. It is a practice to introduce in this contract the obtaining of constructing permit from the City Hall. Detail design for execution is completed during the construction period.
h. *Fulfillment of technical – economic documentation.* The consultancy company which fulfilled the technical – economic documentation submits it to the Technical Service. The feasibility study may last 1-3 months and Technical design between 3-6 months.
i. *Investment list submittal to MH.* The Investment list, Substantiation Note, calculus annex, expertise report and the budget are submitted to MH – Budget dpt.
j. *Budget approval. M*H approves the budget. Even though it is not officially approved by May-June, the hospital knows within the first 3 months of the year if it would be approved or not in the submitted form.
k. *Investment documentation submitted to MH – Investment dpt.* Feasibility study, Substantiation Note, calculus annex, technical design and the approved budget are submitted to MH – Investment dpt.
l. *Investment approval.* MH approves the investment and issues to hospital an Investment card.
m. *Launching of building works public acquisition procedures.* Until the hospital receives the investment card, the hospital already launches the procedures for public acquisition of the building works.
n. *Constructions permit obtaining.* The hospital requires the City Hall for the issuing of the Construction permit required to start the construction works. City Hall issues the construction permit.
o. *Selection and contracting the construction company.* Selection committee decides on the best construction bid.
p. *Construction works start up.*
q. *Construction works monitoring.* The hospital representatives verify the execution framing in legal regulations, invoicing, budget limits, and works quality.
r. *Resuming the bureaucratic process.* For the same investment already approved, if its finalization exceeds December, then the bureaucratic process is resumed for the points listed above: b, c, e, h, I, j and k.
s. *Works taking over*

In the Annex IX there is more developed the infrastructure project cycle with funds from Ministry of Health.

In the table no 8, below, an outlined comparison between two projects, one carried out through ROP funds and the other through Ministry of Health financial support. One might be noticed differences within the identification phase, especially, where basically, a project would pass different steps for each funding option; the funding phase stays with differences in logical steps-wise. Within the design, monitoring and implementation phases there are no differences at all in tracing an infrastructure project.

Table no 8 - Outlined comparison of a project's cycle with two different funding sources

Phase	ROP	MH
I. Identification		
1. Identify hospital infrastructure needs	***Primary investment needed report***	***Investment list***
2. Understand the application procedures	***Minutes of meeting***	
3. Analyze the available resources	***Inception resource report***	
4. Evaluate the eligible criteria required by Applicant guides ROP	***Own evaluation file***	
5. Analyze the context and the community needs	***Community needs file***	
6. Draw up the substantiation note		***Substantiation note***
7. Draw up the expertise report		***Technical expertise report***
8. Initial budget development		***Tentative budget***
9. Assess the socio-economic impact of the project development	***Project impact report***	
10. Assess the project's sustainability	***Project's sustainability report***	
II. Design		
1. Contract the Feasibility study (FS)	***Contract FS***	***Contract FS***
2. FS development	***FS***	***FS***
3. FS approval	***FS approval by evaluators***	***FS approval by MH / DSP***
4. Draw up the "Hospital activity report"	***Hospital activity report with performance indicators included***	
5. Required permits collection	***Permits required***	***Permits required***
6. Edit, assemble, verify the application	***Application folder***	***Request folder***
7. Submit the application	***Submit the application to RDA***	***Submit the investment documentation to MH***
III. Appraisal		
1. Administrative appraisal	***Administrative appraisal passing letter – RDA***	
2. Eligibility appraisal	***Eligibility appraisal passing letter – RDA***	***Investment appraisal by MH***
3. Technical and economic (TE) appraisal	***TE appraisal letter –independent experts***	***Budget appraisal by MH***
IV. Funding		
1. Pre-contracting –site visit	***Report by RDA***	
2. Preparation and submission of technical design	***Technical design approval***	***Technical design approval***
3. Contract signing	***Contract***	
4. Budget approval		***Budget approved***
5. Investment approval		***Investment approved***
V. Implementation and monitoring		
1. Public procurement for constructions	***Contract signed***	***Contract signed***
2. Construction works	***Infrastructure project***	***Infrastructure project***
3. Payments	***Payments done by ROP***	***Payments done by MH***

IV. DESIGN PROCESS

This quite complex process develops through more stages: (1) Scope of design, (2) Surveys, (3)Feasibility study, (4) Urban planning certificate, (5) Permits, (6) Technical design, and (7) Authorization of Construction.

1. *Scope of design.* The scope of design is the basic document for further design and execution. This document is supplied by the project beneficiary to the designer. The scope of design comprises at least the following elements: (a) Brief description of the existing situation, (b) Works to be developed within project, (c) Minimal description of each work, (d) Specific requirements to be observed by the designer, (e) Available land surveys and (g) Design stages.
2.*Surveys.* Depending on the project features specific surveys are needed for the design process. The main survey categories are briefly, described below:

a. *Geotechnical survey.* The structural investigation of the project site has a critical importance for the success of the constructions from structural consideration. The stability and durability of any engineering project depends on the careful analysis of the structural parameters of the terrain, as selection of a favorable site depends upon a particular structural element possessed by the rock. Most of the projects require a strong foundation on the stable rocks.
b. *Land survey.* Topographical features have also a primary importance in the construction of any engineering project. Mainly the topographical surveys provide the information about the topography of the construction site. Land survey reveals besides land features the limits for properties. This is an important issue in order to avoid litigations.
c. *Traffic study.* This study is specific to those projects envisaging either rehabilitation or new construction of roads and/ or bridges. Traffic study reveals important issues which support engineers to size the respective transportation infrastructure and to provide the proper technical solution depending on road/ bridge category. The foremost elements the traffic study reveals: Vehicle flows on categories, Traffic durations, Traffic capacity of the road section, Prognosis of the generated vehicle flows.
d.*Hydro - geological study.* This study identifies and describes the hydro geological features of the project site. Hydro - geological study is intended to provide the designer solutions to deal with water identified underground, accumulation of rain waters a.s.o. This study also gives information about the chemical – physical analysis of the soil in project area.
e.*Environmental impact assessment.* The environmental impact assessment represents a specific procedure required by environmental authorities as a basis for providing the environmental permit. Depending on the environmental impact of the project, this procedure can span from 30 days up to 6 months. This procedure usually starts with the preparation of the environmental expert of environmental documentation which is submitted either to the District or Regional Agency for Environmental Protection (AEP). AEP decides if an environmental impact study is necessary for further procedure. If not, usually the environmental permit is granted. If the project is assessed as having a great impact on the environment, than the longer procedure applies (the environmental impact study is necessary). During this procedure consultation of local/ regional communities (population, business environment etc) is an important step.
f. *Historical study.* Historical study is requested for project envisaging historical sites. They reveal the historical importance of the site represents in the same time a justification for rehabilitating the site.
g.*Cultural heritage study.* The cultural heritage study is compulsorily requested by Cultural Authorities when the respective project concerns either as a whole or partially works on cultural heritage patrimony: buildings, fortresses, streets, bridges etc. This study is submitted to the Cultural Local/Regional Authority. The specific permit is granted only for the projects which demonstrate that the cultural heritage shall be protected and preserved at the initial heritage parameters.

3. *Feasibility study.* The technical – economical documentation for public works observes the settlements of the Romanian Governmental Decision no. 28 from 2008 which stipulates its structure and subsequent design steps according to the project category:

a.*new construction and extension of existing constructions.* In the situation the project deals with new construction or extension of some existing one the engineer follows three steps during designing process: feasibility study, technical design, detail design for execution.
b.rehabilitation/transformation/modernization/ consolidation of existing constructions
In case the project envisages works for rehabilitation/transformation/modernization/ consolidation of existing constructions the designer must proceed according to the next steps: expertise of the construction, documentation for intervention on construction, technical design, detail design for execution.

The documentation for intervention on construction represents actually the feasibility technical documentation without cost – benefit issues. The Feasibility documentation presents the foremost work parameters as well the technical and economic

indicators of the project. Feasibility documentation has written parts and drawings and must be accompanied by specific studies as mentioned in the previous sections.

4. *Urban Planning Certificate.* Whenever construction works are to be developed, the project beneficiary must obtain the Urban Planning Certificate from local public administration. This Certificate is issued either by Urban Department within City/ Town Halls if the project has local coverage or by Urban Department of the District Council for the construction on surfaces that outrun the limits of an administrative-territorial unit.
Urban Planning Certificate is an official paper which informs both project beneficiary and designer about the construction conditions and the permits the beneficiary has to obtain prior construction works start. In order to obtain the Urban Planning Certificate, project beneficiary must obey the procedure stipulated by Law no.50/1991, republis7hed, with the later modifications and completions.

5. *Permits.* When speaking about permits one must distinguish between: (i) Permits released by the local/ regional suppliers for electricity, water and sewerage, natural gas, communication etc services; (ii) Permits released by local/ regional authorities: Environmental Protection Agencies, Civil Protection, Public Health, Cultural and Heritage, Protected Areas, City Halls and Police etc.

Each of the above mentioned permit organization could generate the following situations: (i) Release the permit without objections; (ii) Release the permit with objections (supplementary conditions the beneficiary must obey and the designer must envisage when developing further designing papers); (iii) Refuse to release the permit.

6. *Technical design.* Technical Design as mentioned previously in feasibility study section observes the stipulations of Government Decision no. 28 from 2008. The technical design must provide sufficient information for all work categories the project comprises. The law requests these details as the technical design is the main document the constructor later uses for execution.

Technical design comprises written files for each design specialty and respective drawings and calculations. Shortly, the main components of the technical design are enumerated below:

a. *Written parts:* General issues related to project promoter; General description of the project with reference to location, topography and geological features, main works, access ways etc; Technical reports for each category of works (electricity networks, water supply, sewerage, access ways, platforms, buildings etc); Technical specifications for each works category; Bill of quantities for each works category and the summary; Execution time schedule.

b. *Drawings:* General layout, Main topographical drawings, Drawings with project objects, Cross – sections for buildings, Architectural drawings, Structural drawings, Installation drawings,
Drawings for equipments to be procured within project (positioning, flows, cinematic charts etc).

All six above described stages end up with:

7. *Authorization of Constructions.* The authorizations for constructions are released on the basis of the Law no.50/1991, republished, with the later modifications and completions. The authorizations for constructions are released for any kind of works such as: new construction, reconstruction, consolidation, modification, extension, changing of the destination of any kind of construction, hydro-technical works (fitting outs of river beds), works for land improvements, works for infrastructure, new production facilities, enclosures and urban furniture, landscaping, parks, markets and other works for the fitting out of the public spaces, excavation needed for the geo-technical studies, geological prospecting, exploitation of quarries, gas and petrol wells, other surface or underground exploitations. The competent authority to release the Authorization for Construction is the same which issues the Urban Planning Certificate.

V. HEALTH INFRASTRUCTURE PUBLIC BUDGET ANALYSIS

V.1. General Health budget components. The Health Public Budget is consisted by: Ministry of Health (MH) budget, National Health Insurance House budget (NHIH) and District / Local councils. Only for the infrastructure side, EU and the Ministry of Regional Development Romanian and Housing, through the ROP Axe 3.1, are also contributing to the national health public budget. Additional health budgets are included within the total budget of several ministries and institutions namely: the Ministry of Defense, the Ministry of Administration and Interior, the Romanian Intelligence Service, Protection and Guard Service, the Foreign Intelligence Service. However, these budgets are not public health and won't be further considered in this report.

In the figure 3 (*below)* are presented the flows feeding the public health budget, which is viewed in two main components: (1) medical services and materials and (2) investments: equipment (medical or non-medical) and buildings.

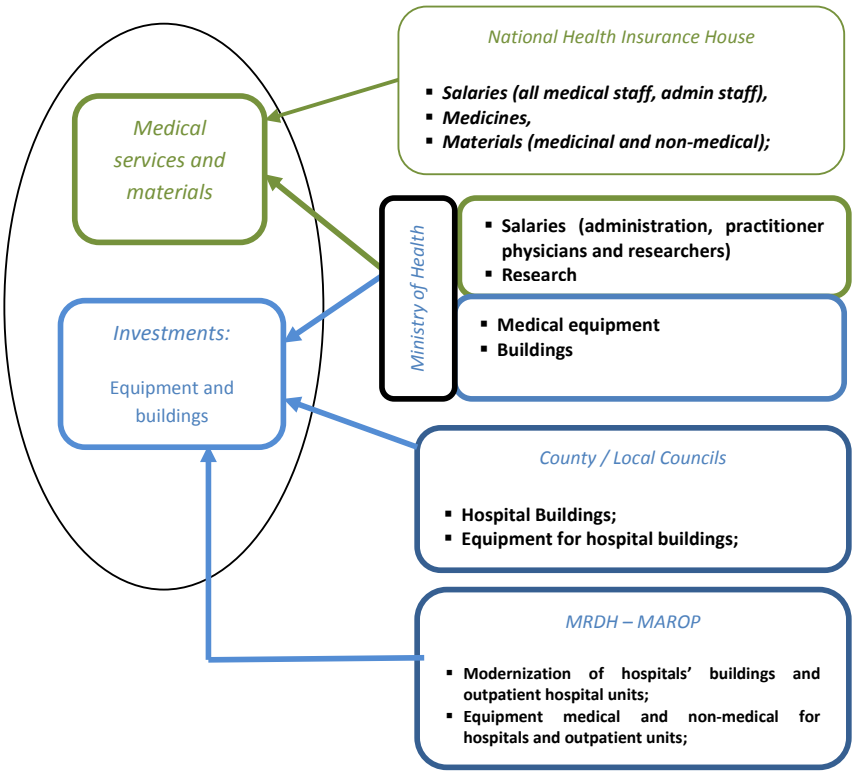

Figure nr 3 – Contributors to Public Health Budget

V.2. The Health Budget for 2009. In Figure 4 (*below*), the contribution of NHIH is substantial, with 85% of total[15], being followed by MH one, with 13%. The budget allocated by DCs was estimated in keeping with the data obtained in the survey carried out by consultant, in this scope, among all District Councils (*see Table 11*); Thus, the data presented for 2009, were obtained by multiplying the data obtained for 2008 with a coefficient of 20%, being the same coefficient when comparing 2007 data with 2008 ones. Still, this is not the entire picture of the budget allocated by DCs / LCs to health sector, as there should be added the amounts spent by Local Councils and the amounts allocated for the utilities required to operate the buildings; it will be relevant to develop a larger survey to find out the total amounts spent by County / Local councils to sustain the health care.

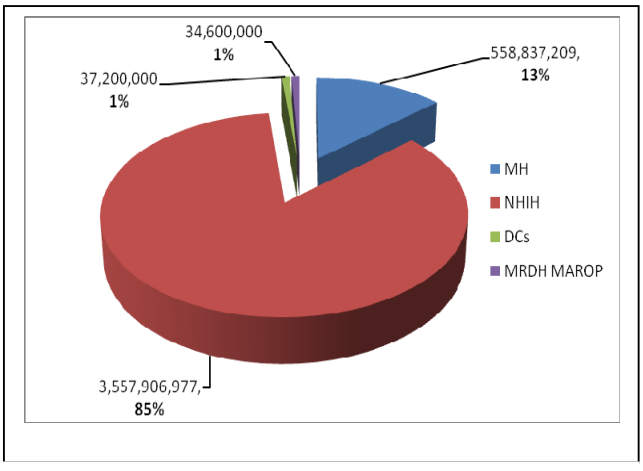

Figure no. 4 – The public health contributors' share to budget in 2009 (euro)

As for the budget allocated by MDRH MAROP, even though for 2009 the released funds might be higher than the estimation in the right, it was equally divided the entire amount allocated for 5 years, through Axis 3.1.

V.3. The health budget dynamics. The data for this analysis were provided by the National Institute of Statistics, the Ministry of Health, the NHIH, and the district councils. The consultant noticed the non-compliances among the value of the same indicator and notes are mentioned when the case.

In the table no. 9 *(below)* are shown the general indicators over the health public budget, as it is revealed by the State Budget and the NHIH budget. Against GDP it is noticed a kind of constant trend varying 3.7 -3.8 % of GDP, with some exceptions in 2004 and 2006 when this indicator went down to 3.4%. As regards to the share of health in the total budget, it is recorded the lowest level, since 2000, in the budget proposed for 2009, being 2.5%. Also, 2009 records a lower amount for health rather than previous two years, and this is in current prices. The total heath budget (including NHIH funds) is minus 10.5% in 2009, than 2008 one, in current prices.

Table no 9 –General data over health budget (million lei)

	Item	2000	2001	2002	2003	2004
1	State Budget initial	15,468.0	21,580.5	23,783.2	29,104.5	35,129.0
2	State Budget – adjusted	14,916.8	18,401.2	22,682.4	28,145.1	34,073.5
3	MH Budget – initial	474.9	820.4	980.8	1,242.8	1,241.7
4	MH Budget -adjusted	528.2	1,023.6	1,013.3	1,232.2	1,308.0
5	NHIH Budget – initial	2,309.6	3,593.4	5,086.3	5,674.1	6,477.1
6	NHIH Budget – final	2,553.5	3,742.3	4,834.9	6,228.3	7,001.4
7	Health budget adjusted *(= 4+6)*	3,081.7	4,765.9	5,848.2	7,460.5	8,309.4
8	GDP (mil lei)	80,377.3	116,768.7	151,475.1	197,564.8	246,468.8
9	Health / GDP *(=7/8)*	3.8%	4.1%	3.9%	3.8%	3.4%
10	MH budget / Health. Budget adjusted *(=4/2)*	3.5%	5.6%	4.5%	4.4%	3.8%
	Item	2005	2006	2007	2008*	2009*
1	State Budget initial	38,795.0	43,879.6	67,173.3	80,964.0	94,767.5
2	State Budget – adjusted	38,782.4	51,508.9	70,737.1	86,940.3	94,767.5
3	MH Budget – initial	1,517.8	1,473.7	2,464.0	2,496.8	2,403.0
4	MH Budget -adjusted	1,534.2	1,489.7	2,459.5	2,499.7	2,403.0
5	NHIH Budget – initial	7,624.4	9,010.6	12,113.0	16,775.2	15,299.0
6	NHIH Budget – final	9,157.4	10,170.5	12,859.1	16,775.2	15,299.0
7	Health budget adjusted *(= 4+6)*	10,691.6	11,660.2	15,318.6	19,274.9	17,702.0
8	GDP (mil lei)	288,176.1	344,650.0	404,708.8	N/A	N/A
9	Health / GDP *(=7/8)*	3.7%	3.4%	3.8%	N/A	N/A
10	MH budget / Health. Budget adjusted *(=4/2)*	4.0%	2.9%	3.5%	2.9%	2.5%

Source: Budget laws and National Institute of Statistics

In absolute figures, in the period 2005 - 2009, the total State budget increased with 144.3% but Ministry of Health one went up only with 65.6 %, in current prices.

V.4. The Health infrastructure budget. The budget for public health infrastructure is fed by Ministry of Health, District/Local Councils and Regional Operation Program trough MRDH. In the figure 5 (*below*). For 2009, one could be noticed the largest share being held by District Councils with 42%, followed by MRDH – MAROP, altogether have 81% of the total budget allocated for public health infrastructure. The same mention regarding the accuracy as above paragraph it is applied in this figure, too. Of the total health budget, the investments hold a separate section dedicated. The table no. 10 *(below*) shows the dynamics of the investment funds with Ministry of Health as a source.

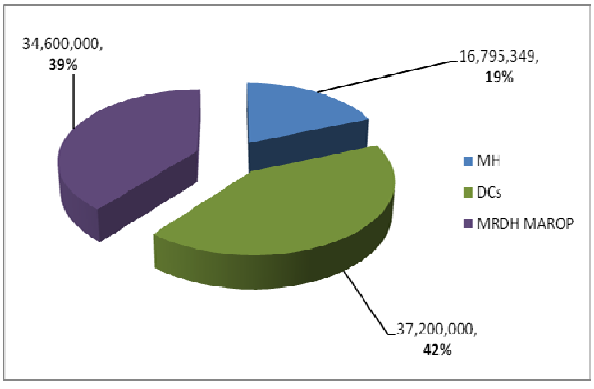

Figure no. 5 – The contributors' share to health infrastructure budget in 2009 (euro)

Since 2002, a sharp downturn occurred for the investments' share in MH's budget, from 32.9 % in 2000 and 38.1% in 2001 at 10.1% in 2002; this

indicator has been on a downgrading scale to a minimum record in 2007 and 2009 when only 3.2% and 3.0% respectively were allocated for investments. An explanation, for 2002 down, stands in the hospitals real estate property transfer from Ministry of Health to District / Local Councils. It is supposed that these councils would have taken over these investments out of their budgets.

The decreased interest showed for health investments it is not only percentage-wise; the absolute amounts indicate even a deeper reduction, as after 2001 the amounts dedicated for investments decreased from 207 mil lei to 109.8 mil lei in 2004 and 158 mil lei in 2008. The record low, after 2000 is to come up in 2009 when 72.22 million lei is to be allocated for health investments; that means 54% lower than previous year, in current prices.

Over the last ten years, the initial budgets allocated for health investments suffered reductions against the adjustments done within a fiscal year. Thus, even though the general health budget was upward adjusted, the investments' one didn't.

Despite, some political statements and commitments, the year 2007 is marked by a record negative adjustment in health investment budget, being cut with more than 50% versus the initial budget approved.

Table no. 10 – Ministry of Health infrastructure budget (million lei)

Item	2000	2001	2002	2003	2004
MH bdgt - adjusted	528.2	1,023.6	1,013.3	1,232.2	1,308.0
of which, invest - adj	173.8	389.7	102.7	140.2	109.8
initial invest	173.8	207.0	119.4	150.4	109.8
dif investments	0.0	182.7	-16.7	-10.2	0.0
% invest / MH bdgt	32.9%	38.1%	10.1%	11.4%	8.4%
Item	2005	2006	2007	2008*	2009*
MH bdgt - adjusted	1,534.2	1,489.7	2,459.5	2,499.7	2.403
of which, invest - adj	110.9	166.5	78.0	159.2	n/a
initial invest	145.5	174.4	158.7	158.0	72.22
dif investments	-34.6	-7.9	-80.7	1.2	n/a
% invest / MH bdgt	7.2%	11.2%	3.2%	6.4%	3.0%

Source: Budget laws and National Institute of Statistics

V.5. District/Local Councils contribution to the health's infrastructure budget. A major contribution to health infrastructure – as noticed in Figure 5, above – is in the line of the District Councils. The amounts allocated by District/Local councils budgets for hospitals' infrastructure are not collected by any central institution, thus the Consultant launched a survey among all the district councils in order to find out the budgets directed to hospitals infrastructure. The results would help to see whether the 2002 decreasing is offset by District councils' budgets. The results *(see table no 11, below)* show that District councils didn't invest anything in 2002, among the councils interviewed a single one, Cluj, made such as that was right the year when the real estate was transferred and it wasn't time to introduce the required amounts in budgets; also, no budget transfer from Ministry of Health happened. Consequently, it might be stated that the decrease registered in 2002 for health investments it is a real one.

Table no 11 – Amounts spent by District councils for hospitals' infrastructure (euro)

District Council	2002	2003	2004	2005	2006	2007	2008
Dambovita	0	0	0	0	72,525	100,300	1,111,123
Covasna	0	0	0	210,635	210,635	396,349	234,921
Vrancea	0	0	0	0	127,841	0	0
Mehedinti	0	0	0	0	352,111	822,075	473,487
Braila	0	6,201	41,239	57,764	262,056	220,206	1,199,639
Brasov	0	9,405	121,940	164,358	362,623	931,816	2,428,558
Salaj	0	0	0	0	48,195	128,682	225,007
Arges	0	0	92,260	0	87,330	208,563	0
Caras Severin	0	33,587	65,453.00	31,866.00	89,494.00	214,241.00	0
Sibiu	0	24,663	10,231	225,567	526,353	682,901	1,283,076
Valcea	0	13,179	0	11,422	23,119	54,423	65,597
Iasi	0	0	0	0	315,333	572,515	478,216
Cluj	36,751	78,617	177,452	776,896	1,219,268	1,671,341	1,856,584
Teleorman	0	0	0	0	0	135,135	135,248
Harghita	0	0	22,222	11,050	5,156	101,502	58,696
Prahova	0	0	0	0	225,011	1,953,779	384,596
Maramures	0	0	13,449	195,777	161,700	83,003	311,988
Neamt**	0	9,576	17,734	69,441	163,232	355,875	400,097
Dolj	0	0	0	0	0	1,080,282	541,535
Ialomita	0	0	143,005	9,860	133,402	99,871	262,696
Arad	0	0	35,310	153,526	113,636	358,343	247,524
TOTAL	36,751	175,228	740,295	1,918,162	4,499,020	10,171,202	11,698,587

Source: Romair Consulting, Romtens Foundation

Data above might prove the District councils capacities and attention paid for their hospitals. It seems like it has taken a while until the District Councils figured out the organization and their role in managing – for this stage – the real estate of the hospitals. It should be also added that the values in table no. 11 are only for infrastructure investments; additionally, funds are transferred to hospitals to cover the expenses with utilities: electricity, water, gas and heat[16].

V.6. Regional Operational Program – Axis 3.1. - *Rehabilitation/modernization/equipping of the health care infrastructure".*
The Regional Operational Program supports the implementation of the national strategy in the healthcare field, aiming to make the health services more efficient, through the hospitals' infrastructure rehabilitation and equipping, as well as through the rehabilitation and equipping of the ambulatory health care centers.
The overall financing allocation for the entire key area of intervention of the Axis 3.1. Rehabilitation/modernization/equipping of the health care infrastructure is of Euros 173,588,779, out of which Euros 147,550,461 from the FEDR and Euros 26,038,318 from the national co-financing (from public sources).

At the 12th of February 2009, there were submitted 26 projects, out of which 19 have been accepted. They are now in different stages of fund accessing: (a) Contracting stage: 1 project, (b) Technical Design Stage : 12, (c) Economic-Technical Appraisal Stage : 2, (d) Checking the Eligibility Stage : 1, (e) Verification of Conformity Stage: 2, (f) Administrative Evaluation Stage: 1.

The value of these projects is of Euro 48,733,278.61. The situation of these projects comparing with the total allocation of the axis is presented in table 12 below and is classified into regions:

[16] *As stipulated in GO 70/2002*

Table no. 12 – 9

Region	North-East	South East	South	South-West	West	North-West	Center	BI
Financial allocation as a rough guide a (mill euro)	28,33	23	24,7	24,32	17,95	20,99	18,91	15,38
Value of the projects submitted (mill euro)	4.03	31.19	0	5.97	2.32	3.15	2.07	0

Source : MRDH – MAROP

The projects whose values are presented above represent only the ambulatory units. No District Hospital included.

The fact of having projects only submitted by the out-patient clinics is a result of one of the most significant errors made within the Applicants Guide which is currently using two standards when judging the two types of sanitary units which are eligible for funds:

- For hospitals the Applicants' Guide is requesting them to be on the list approved by the Ministry of Health in order to be eligible for getting funds (through the District Councils)
- For the out-patient ambulatories the Applicants' Guide is not requesting them to be on any list (approved or not by the Ministry of Health) and this practically opened the way for these units to submit projects (through the LPA)

As a consequence of this error, the process of submitting applications is biased and there is a chance to have the following types of results:

- First to have an uneven balance between the number of hospitals/outpatient ambulatories renewed
- Second to completely disregard the strategy of development of medical services according to a sanitary plan
- Third to allow the access to funding of those who are faster but whose needs are not necessary the most demanding ones (and in accordance to the needs of the population served) because there is no mechanism in place for balancing this process which could lead to allocation of all funds only for out-patient ambulatories.

V.7. Hospital budget. Hospital budget development is regulated through Order 896 / 2006, where the steps in drawing up the budget and budget format are presented. The budget construction is a key element in hospital management, yet it seems there is a necessity to train, in this respect, the managers or director council members which have important responsibilities in developing such a document.

Incomes. Hospitals funds consist of four major sources: (a) National Health Insurance House, (b) Ministry of Health, (c) County / Local Councils, (d) Hospital own medical services provided off the NHIH contract. An important item in the hospital budget is the *contract with NHIH,* which represents an average of around 90-95% out of the total hospital incomes. The NHIH funds go to medical staff and administrative salaries, medicines, drugs, health care supplies, office supplies. This contract is not important only money-wise but for its relatively high degree of predictability versus the other two main sources. In table no. 13, below, this predictability it is obvious when one is compared the initial developed budget versus final amounts.

Funds from *Ministry of Health* covers: (a) Objectives and activities enclosed in the national health programs; (b) Medical equipment; (c) Buildings; (d) Buildings repairs and rehabilitation; (e) Salaries for house physicians and researchers; (f) Research activities; MH funds share varies in keeping with the investment plans and might be limited between 3-10% of total budget of the hospital. In the previous sections there was mentioned the existing confusion regarding the funds from MH directed for investments; it is not sure for hospitals whether the funds asked for investments would be released or not. As there is no criterion of prioritizing the investments in hospital infrastructure, the hospitals do not include this category in the initial budget as it is marked with uncertainty; this fact it may be noticed in table no 13, below, where in 2007, the exampled hospital received a considerable amount for infrastructure, but it wasn't included in the initial budget, even though the investment plans are developed in the previous year.

For the hospitals whose real estate is under *District/ Local Council* ownership, the incomes post a component from this council as well. These funds are directed to cover those expenses, mainly related to infrastructure: buildings maintenance, repairs, rehabilitation as well as to utilities and equipment required for building operation: heat power units, lifts, air conditioning devices etc.

District council's funds are on an increasing trend as it was noticed in table no. 11, above. However, these funds may be characterized of the same uncertainty as those coming from MH. The fourth main source of hospitals income comes from *own medical services off the NHIH contract*. In majority of hospitals this income share has been increasing in the last years and becomes a more and more reliable source of the budget. Its share may vary within a total budget between 0.5 – 2 %. The procedure for the budget development within a hospital involves the support of units' chiefs and cooperation with the financial department when the needs are assessed. The experience has shown a less interest of these units' chiefs – which are more oriented towards their clinical medical activities rather towards their managerial ones – to asses in a more detailed and sound manner their units' needs; thus when this procedure is applied the budget gets doubled, citing a financial director interviewed. A need for regulations in hospital budgeting was identified; nowadays informal norms are applied within hospitals as well as in any other State institutions is to rely on budget history and to increase the amounts in certain budget lines without any concrete calculations based on needs. This is because of the uncertainty planning over a justified budget.
Expenses. Salaries for medical, research and administrative staff stand for 20-27% of the total budget and, usually, it is not the highest expense within a hospital. The salaries for medical and administrative staff are paid from NHIH contract and salaries for researchers and house physicians are paid from MH funds. The category named "goods and services" comprises the expenses with medicines, drugs, other health care supplies, office supplies and represent the highest expense within a hospital budget with a share varying –generally - on a range between 65 -75%. The equipment and infrastructure category is not easily to be predicted and it is marked by a higher degree of uncertainty within a budget and not a constant yearly variation. It depends on MH and District/Local Councils plans and budgets; the allocation of these institutions' funds – with important role for hospital infrastructure – is not a known variable for hospitals and it is not commonly included in the initial budgets. As it is presented in the example below, the dedicated budget lines could be frequently 0.

Table 13 - Hospital budget example (lei)

	2007		2008	
	initial budget	final	initial budget	final
Total incomes	74,106,380	93,379,688	146,566,060	149,255,474
Own Medical services	2,200,000	1,692,225	0	2,962,705
Research	2,427,270	1,979,594	3,327,950	2,894,075
NHIH contract	69,239,110	83,475,379	143,160,110	143,159,700
Subsidies	240,000	9,043	78,000	238,994
National Health program	0	149,967	0	0
Investments	0	4,000,000	0	0
Buildings rehab	0	998,185	0	0
Medical equip	0	729,952	0	0
Other assets from vice tax	0	345,343	0	0
Total expenses	74,845,130	90,026,636	155,192,560	146,678,582
Salaries	23,369,630	24,423,630	33,905,880	33,887,439
Goods and services	49,033,850	58,103,934	119,678,800	111,776,780
Constructions	0	4,000,000	0	0
Equipment	0	0	1,566,410	974,052
Furniture and office equip	2,388,650	2,484,203	41,470	40,311
other fix assets	53,000	16,684	0	0
Buildings rehab	0	998,185	0	0
Result	-738,750	3,353,052	-8,626,500	2,576,892

Source: Institute of Infection Disease Matei Bals

VI. MANAGERS' TRAINING: THE EXPERIENCE OF HEALTH SERVICES MANAGEMENT SCHOOL

Assessing hospital managers' preparedness focuses on documents research (laws, regulations relating to training, course materials and presentations), the feedback of the course graduates, lecturers, using a combination of quantitative and qualitative techniques.

The evaluation aimed especially the teaching process, starting from the premise that this area is flexible, adjustable and decisive in shaping the results.

Key evaluation questions were:

- *Does this public hospital management training provide necessary knowledge and skills to design and implement hospital infrastructure projects?*
- *Does hospital management organization course (length, structure, method of teaching and assessment) provide training and management skills development?*
- *What are potential approaches in order to improve the managers training course?*

VI.1. Legal framework; Main Stipulated Training Objectives.

National School of Public Health and Health Services Management (SNSPMS – Romanian abbreviation) operates under the Order No. 841 of 10 July 2006 issued by the Minister of Health, Minister for Education and Research and President of the National Health Insurance House. This Order approved the rules of organization and operating status, organizational structure, the functions and personnel structure of the National School of Public Health and Health Services Management. Planning and development for the mandatory hospital management course was approved by Order no. 635 of 3 June 2006, issued by the Minister of Health. Organization and development of the public health administration and health management course, required when filling in a position of hospital manager was approved Management operates under Order No. 635 of 3rd of June 2006 issued by the Minister of Health, Gheorghe Eugen Nicolaescu. According to this Order, completing this course is necessary previous to filling in the hospital manager position. The course running for 2 months is organized by the National School of Public Health and Health Services Management. All selections for filling in the position of public hospital manager that took place after issuing the Order No. 635 had as an application requirement to have completed this mentioned course. For instance, the selection for filling in the public hospital manager position organized by the Ministry of Health in the period 26 October 2008 - 4 November 2008, had as registering conditions the following:

- Applicants must be undergraduates with a bachelor degree
- Applicants must be graduates of the public health administration and health management course organised by the National School of Public Health and Health Services Management
- Applicants must have at least 2 years of experience in their current position
- Applicants must not have a criminal record,
- Applicants must be physical and neuropsychiatric capable persons, who are not close to the mandatory retirement age, and who paid the selection tax.

Main Stipulated Training Objectives

According to the Ministerial Order 841/ 10th of July 2006 (chapter II, art 4, 5) both the activity and aim of SNSPMS, as specialized training institution are: "issuing and certification of the standards for managerial competency, course training mainly in public health, administration and health management."
While "engaged in scientific research and health promotion, given the role of technical and vocational forum of the Ministry of Public Health, develops proposals for specific public health strategies, and provides technical assistance in public health and private health management" (Article 4)

From a total of 14 targets of activity (cf. Article 5, chap. II Ministerial Order 841/10 July 2009) 6 objects of activity of SNSPMS refer directly and explicitly to training:

- In the design and conceptualization phase through the elaboration of standards, methodology of training, continuous education and certification of skills in healthcare management (para. 1 of art. 5);
- In alignment with international linkage and integration of national standards of managerial competence in health standards and good practices in EU;
- Effective implementation of training programs by organizing and conducting courses in public health administration and health management and improvement of personnel with higher education (para. 3 of Article 5) and implementation of certificate courses, short courses and other specific public health, health promotion, health management courses, especially for staff working in healthcare, including public and community health (para. 4 art. 5).

Also another paragraph indirectly refers to training and provision of methodological and technical publications specialized in SNSPMS's competence fields (para. 13, Article 5)

Paragraph 14 of Article 5 specifies among other related activities the role of SNSPMS in creating performance instruments for analyzing and evaluating public health and management.
The remaining paragraphs relate to the conduct of research and development activities in the field of health management (as well) (para. 7, art. 5), activities related to national programs and activities of analysis, evaluation and monitoring of health services (para. 8), technical assistance in the field (and) management of health services (para. 9) and the achievement of specified activities (and) the health management as conducting studies and applications for assessing and improving health system performance or other documentation, analysis and projects to support the reform process in the context of European integration (para. 10);

VI.2. Purpose and objectives undertaken by the / under the National School of Public Health and Health Services Management.

Stated purpose of National School of Public Health and Health Services Management is "To be actively involved in formulating strategies and reform policies, in order to increase effectiveness and efficiency of health services". Thus the institution assumes the role of link between the leading structures of the ministry and the operational structures and awaits some visible results at the level of care.

One of the ways in which it acts is developing and improving managerial skills of health professionals and social assistance. The school promotes the role and status of the health management profession and develops continuing education programs destined to healthcare management and health professionals, tailored to specific needs.
Besides training activities, research and evaluation of health services, dissemination of results and development of strategies for health promotion, health education and disease prevention activities are included.
Areas of activity alleged to achieve the stated objectives consist primarily in organizing a number of courses:

- Organize and conduct courses in public health administration and health management and improvement of personnel with secondary and higher education, especially health oriented;
- Organize and conduct training for obtaining the certificate, short courses and other courses specific to the public health, health management, especially for staff working in healthcare, including public health;
- Organize and conduct the university masters, including partnerships with institutions of national and international profile;
- Training and upgrading of civil servants in health system and social health insurance system.
- Develop standards and training methodology, retraining and certification of skills in health care management;
- Linking and integrating national standards of managerial competency in health standards and best practices in the European Union.

VI.3.Hospital Management Course Structure

SNSPMS organizes certified courses, aiming continual medical education. Therefore, short courses on specific themes are organized such as:

- Continuous improvement of health services quality,
- Introduction to health services management (for nurses);
- Health policy (for decision makers) ;
- Office Management (for family doctors) - training programs for primary health care, etc.

Ministry of Health accredits all training programs organized by SNSPMS and the Romanian National College of Physicians accredits continuous training courses.

Hospital Management Course

The program aims to provide know-how in the field of hospital management for staff with higher education, that are interested in this field and to provide training for hospital managers allowing them to manage hospitals at a top level. Module course is structured as follows:

- Management and organization of hospital services;
- Funding Based on DRG system;
- Health Economics;
- Financial Management;
- Human Resources Management;
- Quality Management in Health Services and Performance Evaluation;
- Internal Audit.

For physicians, the course is credited by the Romanian College of Physicians.
Topics include issues: management and health services organization, health economics, financial management, Funding Based on DRG system, human resources management, quality management in health services and audit. Course duration is 14 days, 2 days per week (for 7 weeks). The course started on the 18th of April 2007, in Bucharest only.
Along with becoming an institution in 2006, the National School of Public Health and Health Services Management has expanded the curricular areas of health and hospital management, towards training for general manager and health care promotion manager and health education manager, project and program management, funding based on DRG system.

VI.4. Course structure

The structure of the course, namely the text book was assessed by content analysis, taking into consideration the following: (1) Main aim of the course, (2) Theory/practice – general/particular structure, (3) Policy when discussing situations (in terms of similarities and differences), (4) Romanian Situation Analysis, (5) Policy of providing best practice examples, (6) The experience sharing level of trainers, (7) The work between trainers, (8) The experience sharing level of trainees, (9) The interaction degree between trainers and trainees, (10) The facilitation of understanding, text attractiveness, (11) Tools / forms description, (12) Example Construction, (13) Set up of work groups, (14) The individual reading – exchange exposure, (15) Latency of specific address, (16) The use of glossary terms, (17) The ability to resolve problematic and real situations, (18) Arising advisory, (19) Course Program Preparation, (20) Course Curriculum Amendment, (21) Infrastructure Hospital Project Management.

Main aim of the course. The main aim of this course is to enhance mangers' performance by developing their skills. An emphasis on theory and theoretical approaches can be noticed in the hospital management course. Some of the more practical modules are organized around the instruments but the vast majority is theoretical.

At the level of the institution there was a hospital staff training needs assessment - a 2003 study that combined the quantitative approach with the qualitative one. A more recent study could not be identified although it is possible that a trainer evaluation was made by the students and analyzed. Trainers' pedagogical objectives are very ambitious as they strive to transfer their students all they know, all they have learned in years of training, scholarships and work. *Besides the difficulties faced by clinicians when they are forced to change their individual perspective on the case with the collective one, they also are faced with a multitude of words, concepts, definitions that make finding on-hand references difficult.*

Some of the materials are made according to what the trainer knows best from his expertise and not according to what was assumed or observed that learner needs, and especially not by the reality of what can a person absorb in 2 days of the course. Some of the material does not present any interest to the student, representing only possibly interesting approaches, demonstrating the spirit liveliness and the knowledge amount of the lector without any teachings for the current activity. *The manual does not offer – except rarely - ways to solve real, current problems.*

The basic idea is that these managers receive only as many concepts that they can absorb and they need to become more focused, effective and efficient in their managerial activity. In the same time ***it would be recommendable for them to be trained to solve current problems and not for memorizing notions more or less relevant to their current location.*** Setting targets tete-à-tete, making them operational through pedagogical objectives, testing students through general qualitative techniques (focus groups) and possibly involving the students in defining the curricula may be solutions of the dissociation noticed between the expectations of the managers (discovering or finding simplified ways to find a solution to the problems encountered) and the strong scientific offer of the lecturers.

Theory/practice – general/particular structure. Some of the modules have a predominant theoretic approach, so that definition, classification, citing some famous authors take more space, and *applications take a minor space or not at all.* When examples are built, they are relatively remote and arguably up-to-date. Usually, the presentation is a more airy continuation of the chapter in the book. There is no habit of presenting a real case. The reasons why lecturers maintain a fairly consistent theory share in the course structure are based on different views or findings: either lecturers are under the opinion that theoretical knowledge is essential in order to further address practice, or they found that most of these students, do not have prior general management training nor previous reading practice due to lack of time.

It is a fact that most of the students, outside the course material do not have the resources in the Romanian language (translations, original literature). Trainers think that it is difficult to make short, simple, explicit materials, as the students would wish them to be, since management is an integrative science. Some of the trainers prefer building up examples along with the course participants and consider this the ideal solution since clinicians can best express current problems, much better than a trainer can, as most of the time *the trainer does not really practice management or a related discipline being relatively remote from hospital life.*

There are some trainers that teach mostly practical things and are less theory oriented.
On one voice all trainers consider that the students thinking is mainly focused on the individual, real approach, and it is necessary to explain them the management theory that addresses complex /combined structures of people, processes and results in order to get the students used to identify schemes in any reality.
In the modules they teach, the practice is most often equivalent to International/European literature/reality examples inserted in the text or "dripping" during the course and examples from Romanian literature/reality inserted in the text or during the course.

Few trainers build examples together with the participants, to their suggestions, questions or provide students with examples from their own experience or of those with whom they interacted. Most often the lack of time and a large number of students do not allow a debate atmosphere around actual situations described by students. Some of the trainers believe that the essay, the theme that the students have to prepare in order to graduate, provide the student with the opportunity to train and develop his/her skills. But some of the students consider that such a management plan is more a test of the ability to assimilate a formal presentation and less a substantive test of their ability to solve problems. Most trainers consider a practical approach to the manager's course part necessary, either to develop their ability to work together with other colleagues, either to better set the knowledge through the interaction with other colleagues, either because the simulation of real situations is instructive or because during practical examples concepts, approaches are clarified, and practical examples stimulate thinking and action.
The main reasons why the time allocated to practice is not more spacious are: covering theoretical concepts takes a lot of time, difficulty in establishing working groups and students' reluctance to interaction. Being a relatively short course, it is recommended that the theoretical part occupies no more than 30% of the course length, the remaining being oriented on practice, on what is actually to be done in and for a hospital. Since trainers have no direct contact to the hospital life, but only to management books, mangers' involvement in building examples would be desirable. Addressing practical issues with priority would mean prior general management training, prior (short) reading of very clear materials or of Romanian literature (either translations or available originals).

Given the fact that general considerations occupy very much space in most modules, it would be desirable to reverse the general-particular rapport in favor of what is specific. This could be easily achieved with a text book coordinator that could require each module leader to assess their own practical aspects proportion.

The policy of discussing some situations (in terms of similarities and differences): discussing similar situations. In regards of the policy of discussing some situations (in terms of similarities and differences) it can be noticed that for one material (*) made by two Romanian authors and a foreign one (that material is in an annex and is not actually listed in table of contents) a policy of discussion of some similar situations is applied – from other continents, from Central and Eastern Europe, from Romania.
Also, there are modules in which is explained in general terms situations at international levels but it cannot be noticed a concern to facilitate comparisons and draw conclusions from this comparison.

Analysis of the Romanian situation. Some of the trainers focus on presenting the Romanian situation, whether it is more or less near the activity of a manager. Regardless of the reason for introducing this in the presentation, it does have a beneficial role, making the course more comprehensible and useful.

Trainers who analyze the Romanian situation and provide Romanian examples think students are more interested in local examples, compared to more remote examples. They appreciate that such they can provide guidance and advice, contributing to identifying causes of the various problems and to highlight the remedy procedures.

Others consider that based on local examples, the participants to the course can reach the same state of understanding the reality.

Also the trainers can see if the students from clinics have a different perspective than that of the public health professionals. Explaining the Romanian situation should be extended for certain modules and become a dynamic and up-to-date theme. There are some trainers, who present the Romanian situation, but they do not stimulate thinking around the problem either, they only expose their lecture in an unduly didactic way.

The policy of Providing Good Practice Examples. In general, there is a lack of good practice hospital life examples from other continents, from Europe, Central and Eastern Europe, as well as from Romania (same exception *).

One explanation is that hospitals do not network with other hospitals and there has been not noticed a concern, way of thinking, to interact transparently, sharing both achievements and failures. Considering that they are competing, they would think it a risky statement to disclose a mistake or to emphasize solutions. Better access to Best Practices Sheets, a better search for examples worth noted could not only improve the work itself but also the way of thinking.

Trainers Sharing their Experience. The modules are written by people from the institute, with a 5-20 years management career, which generally do not have a direct hospital experience. There is no habit to invite colleagues from the institute, hospital doctors or people with predominantly administrative positions of other institutions / hospitals, mainly colleagues with clinical features of other institutions / hospitals, or colleagues who have administrative or clinical duties of other institutions / hospitals when writing a module.

Such an approach would unquestionably improve the pragmatic and realistic aspects of the course.

Trainers working together: the interaction between trainers / authors. As seen from the list of authors, there is no formal coordinator of the material, each of the trainers being responsible of one of the sections / one of the modules. In a section, most subsections have only one author. It is to be assumed that the assembling of the taught and wrote course materials was not done as a team. Most likely, each of the trainers is elected for his maximum field of expertise, and possibly for the availability to write and teach a specific chapter / a particular theme.

Teamwork would ensure an internal peer review process and would provide an opportunity to adjust the inadequate parts, to avoid lengths, elliptical or conversely too wide approach. It would also be advisable that in writing each chapter to have a co-author or at least a peer review process by the hospital staff. Interaction with current or former managers would avoid the excessive theoretical look, the often sophisticated build of the material, the distance from daily concerns and last but not least the tight, unattractive format.

The differences in styles and visions between the chapters indicate that each trainer writes a part of the course, according to his/her expertise, the course material being put together latter on or indicate that the course material is defined by the heads of units that only manage the authors of their own section. An option would be that all trainers will define the course together and only afterwards to be given to write a part of the material. An issue to be discussed would be: to what extent a trainer closely knows the parts and concepts presented by the other colleagues as well as the time allocated to presenting them; to what extent is there a coordinator who assembles and balances topics that cross-section several chapters; to what extent the unitary, reasonable gradient of concepts is a concern for the trainers / authors.

Experience Sharing Among Trainees. As most trainers admit, students face real system problems, are in a decision-making, solution, position for various issues and the experience of the students is very valuable even when maybe they recorded some failures (telling the story would allow a further preventive approach). Most often they do not take part in discussion topics proposal process, in offering examples or presenting critical situations. This is partly because trainers do not motivate participation but also because most students hold important positions or expect to and therefore their prestige reaction is quite high. There are two ways of overcoming this situation: team working and brain writing techniques when you want the students to be involved. Team work would diminish the negative effects of managers feeling "supervised" judged and as a change the synergy brought by interaction would appear.

Interaction between trainers and students. Partly or as a whole, course interaction between trainers (possibly facilitators) and students is relatively low. A recommendation would be that group or individual exercises take at least as long as enouncing theory. Trainer and student interaction management is difficult - hence some assisting would be a good option. In this case the previously discussed point (trainer interaction in order to develop a unitary curriculum, to establish and implement a plan expressing a pragmatic approach) would become even more necessary. Previous inquiring of key individuals (hospitals) could produce a practical, reality-based course segment.

Facilitating the understanding, attractiveness of the text. Some authors build their material around (more or less clear) rhetorical questions, others use enumeration, bullets, numbering, others historical type story - telling, others stimulate actual issues debates or simply inserting explanatory schemes, figures, graphs, synthetic "cartridge" - boxes. Most likely these methods depend on trainer's intuition, on personal style, eventually on their trainer training. Knowing the students perception over these ways of easing the text accessibility would be interesting. The big number of participants and series could allow the testing of the difference between the effectiveness of different methods.

*Tools and forms description. S*ome chapters describe common, current tools. This description is sometimes exhaustive, similar to a user guide with instructions, sometimes succinct, elliptical, incomplete, having the possibility to be doubled in the course with examples. Not ignoring the value of this pragmatic approach, yet it should be pointed out the students expectations are going to the idea of a course that will teach them to think the way managers do.

Building examples. Examples (with cases, solutions) are relatively scarce and relatively out dated at least, most often contextually. One should pay close attention when building examples. A real Example Policy is desirable in terms of their frequency, content and updating.

As main ways to build examples we can enumerate the following possible variants:

- Trainers present examples having as starting-point questions and suggestions coming from the students.
- Students identify and build their own examples using the previously presented by the trainer theoretical part,
- Students build examples using what they have read, what they have been recommended,
- Students and trainers mutually build examples based on generally accepted problems,
- Students explain situations at their workplace using the previously presented theoretical knowledge.

Any of these can be a good choice as long as it keeps up the interaction level between students and their trainers, one is translated the theory into practice or subject the practical part of the activity to the order brought by the knowledge. Either way, students in general, the private hospital professionals in particular would become key elements, worthy to be consulted, maybe on the base of in-depth interviews or group techniques.

Forming a work group. Management is an interaction-based teamwork occupation. Therefore, it is expected that a course designed to develop managerial skills would imply individual training participation and different kinds of (in) formal groups. An option is ad-hoc working groups put together by the students themselves. Another option is working groups put together by trainers, taking into consideration the diversity and difficulty factors. Role playing is a method that, put into practice, reveals to the students a multitude of relationships and possible interactions, providing them with the opportunity to understand the role other various actors play in the game.

Lecture - individual reading ratio, individual achievements (individual production) – experience sharing ratio. It is unanimously agreed that the effect of a course is best reflected in the assignments of the participants. Such assignments often represent a method for student evaluation. Similarly, management course evaluation requires a management plan including the following:

- Depicting Current Situation,
- SWOT - Hospital Analysis,
- Main hospital problems,
- Priority Problems,
- Management Plan.

The most consistent and comprehensive activity is individually conducted by students in the management plan. Assessment method is rating / grading. However, no student - trainer interaction takes place. As a consequence no successful approach nor inappropriate is either shared or debated within the committee or together with the colleagues. Thus, another chance for exchange is missed. Examples and practice applications should be predominant when it comes to applied management studies.

Various approach patterns can be followed depending on the background of the students. For instance: (i) Theoretical overview - trainer's examples - individual materials study – in class example construction; (ii) Reading the previous course - clarification provided by lecturers at students' request - individual practical assignment - group discussion; (iii)
Example - based teaching, exercises - working group - individual practical assignment.

Therefore is not recommended to apply another pattern, avoidance of debate and interaction: Theoretical Background - home reading - final exam.

Every trainer should complete a self-assignment sheet and determine at what extent the following aspects are applied when teaching:

- Theoretical Overview,
- Trainer Given Examples (in text),
- Examples constructed by the trainer during the lecture,
- Examples constructed by students during the discussions,
- Examples constructed by students in the end-term assignment,
- Reading at home previous to going through the module (receiving materials in advance),
- Reading at home while going through the module,
- Reading at home considering final examination.

Latency in approaching specific situations. In a few modules the material (the text) begins with concrete situations (practice protocols, DRG, hospital organization, accounting); other modules intensely debate issues related to definition, classification, history, and finally address one work tool; there are also courses that at a very small extent present concrete working tools, possibly exposed, in the end and in a lapidary way.

The different ways in approaching the practical part, the deference in presenting it, most likely derives of trainers' mindset as to teaching: some believe that the objective is to provide knowledge related to the taught module. Others believe that the objective is to accustom the student to these tools that will be used in daily life. The correct answer is not with the trainers but with the students who can actually identify the most appropriate version for each module.

Using the glossary. These modules are written in a technical, specialized and incomprehensible language. Only one chapter provides a glossary of terms, also very idiomic. A proper glossary is required, if possible a bilingual one. Moreover, assessing its actual usefulness is required.

Ability to solve real and problematic situations. Some of the modules present worldwide existing situations / problems, without customizing the scenario according to the national context or specific hospital. It would be interesting to know whether these problematic situations are only "presented" or rather "questioned."

Example policy during training periods should determine both the number and especially the ratio of international literature examples, of Eastern European countries literature, national literature and the potential problems that managers could face while working in the hospital. Generally speaking, the course strategy is mainly focused on theoretical approach and less on efforts designed to build and develop skills.

It is highly recommended that those responsible for course structuring assessed the following:

- To what extent editing a module is mainly based on:
  - Reading international reference materials;
  - Translating and adaptation materials given by other trainers with greater expertise;
  - Reading "gray" literature (non- published circulating materials such as government reports, ministry or ministries reports, work groups reports);
  - Discussions with training beneficiaries (the students);
  - Informal needs assessment;
  - Formal (and researched) needs assessment;
  - Talking to field experts;
  - Assigning writing and drafting on the principle of maximum skills and competency.
- To what extent the practice:
  - is an important part of the course;
  - is based on concrete difficulties that managers face;
  - is supported by interaction;
  - allows knowledge transfer;
  - Allows one to create and develop skills;
  - facilitates experience exchange;
  - Enables transferable and related skills;

- Motivates current and prospective participants involvement;
- is disseminated in an appropriate manner (electronic support or paperback, content, transparency).

Advisory flow. Advisory is a way both trainer and student interact and contribute to achieving a better intellectual education product than the student would on his own. Both student and mentor act based on management plan instructions. Their objective is that the student passes his final exam. The temptation to counterfeit an assignment or a better-graded plan is high and only partially offset by the obligation of the students to solemnly declare the authenticity of their work. Management plan assessment originally commenced due a desire to verify managerial skills. It gradually led to a new way to substitute the real practice to an invented one. Perhaps requesting a predetermined theme for the written plan would restore the idea of testing the students' ability to develop a management plan.

Training and development of course curriculum. Most common ways to make a course schedule should be based on:

- Research Assessment of hospital managers training needs,
- Legislation relating to hospital managers duties,
- Identifying student needs during class discussions,
- Comments and observations during student assessment or during class time.

Conversion and adjustment of course curriculum. Since the beginning of hospital management course it seems that the curriculum was hardly changed. This can be justified by the belief that uniform preparation of all series is a desideratum, that initial curriculum was established on the basis of legislation in force / needs assessment study and / or group consultations. Both student feedback and change in legislation required a curriculum readjustment in terms of course content. Training programs conversion / adjustment should indicate dynamics rate, staff flexibility, and concern to incorporate feedback of the participants, whereas not being intrinsically an objective.

Project management of hospital infrastructure. How to manage hospital infrastructure projects is not clearly addressed in any of the 7 modules. As such, this theme's components (defining hospital investment, funding procedures, funding sources, investment bases) are neither directly nor indirectly tackled. Moreover, Hospital Management Course does not include a project management module.

VI.5. Student assessment method

Student Assessment illustrates the same tendency to a more theoretical approach rather than a practical one. Knowledge is evaluated via a set of simple questions, posted on the website previous to examination. Skills are evaluated via a management plan. Only two points of the final grade are given on account of the management plan, the rest when completing the grid test. Preparing a management plan should follow a set of instructions at the same time being an individual assignment. The management plan is submitted on testing day, but it is not presented in the assembly. Formal assessment of public hospital managers was based on the following:

Order no. 112/2007 of the Ministry of Health regarding performance criteria that may extend or terminate a Management Contract before reaching term. Order no. 555/2008 of 28/03/2008 amending and supplementing Appendix No. 4 of Order of the Ministry of Health previously referred to.

Governmental Emergency Ordinance nr.37/2009 regarding improvement measures for public administration activity states that the Ministry of Health organizes the assessment managerial of managerial attainments for the following positions: general coordinator, medical aid deputy coordinator, assistant coordinator for public health programs, deputy coordinator for public health control, financial-accounting assistant coordinator County Directorate of Public Health and the Directorate of Public Health of Bucharest.

Order no. 539 of 29.04.2009 approves the organizing and conducting methodology for assessing managerial attainments for positions such as general coordinator and assistant coordinator within the County Directorate of Public Health and the Directorate of Public Health of Bucharest.

Order 391 on assessing managerial attainments for such positions as general coordinator and assistant coordinator shall be made based on submitting and presenting management projects.

VI.6. Curriculum on Investment

Main reasons for not specifically addressing (in theory or practice-related presentations) topics related to investment are: the idea that writing an investment project is not a topic of interest to most of the students, writing an investment project does not differ much from other management plans, therefore being found in any other project, that management training is aimed at

providing general concepts, building a way of thinking and has no specific advisory role and last but not least the belief that writing a draft investment is a subject beyond importance, as many other business management related topics.

By a wide selection of topics used in evaluation, were found very little on the budget, funds, investments, financial management, capital resources and related issues.

We present some of them in Appendix. As it can be seen, references are vague, circumstantial, sneaked "among others" and do not specify objectives or specific infrastructure investment processes.

The questions check acquirements in a didactic / scholarly way, with little emphasis on creativity, inventiveness, solving actual cases.

Questions based on omission are counterproductive, as they starting from the premises that there are notions and issues that can be included or not in the presentation.

This type of verification can be very useful when talking about simple technical mechanisms simple that are actually dangerous to use (electrical installations, elevators, access traps, and stick jockeys). However, it is no use to present it in a course that has as key point certified expertise when discussing a critical case of a more complex context. This context is only partially under the control of a person. They can be settled by a team and involves a strong degree of collective subjectivity.

VI.7. Expert opinion (the 7 managers involved in the survey)

Expert opinion has been primarily tested on the basis of a 24 points questionnaire addressed to managers.

The analysis addressed responses valued "to a small degree" and "in a very small extent". They were considered together and ordered downward. This percentage detects problems in transmitting necessary knowledge, in order to fulfill the management contract requirements.

The most uncovered activities (regarding knowledge) are ordered descending

The number of responses "to a small extent" and "in a very small extent" 6 of 7

- Develop and monitor fund development for a public hospital
- Identifying financing opportunities for hospital infrastructure projects
- make the annual public procurement plan
- Produce a draft procurement budget
- Negotiate with others matters regarding hospital infrastructure projects

The number of responses "to a small extent" and "to a very small extent" 4 of 7

- Design a hospital development plan
- Income and expenditure drafting of hospital budgets
- Negotiating Medical Services Contracts to the National Health Insurance House
- Evaluation of a project aimed to improve hospital infrastructure
- Estimate ratio of available resources and results
- Estimate required resources in relation to planned objectives

The number of responses "to a small extent" and "to a very small extent" 3 of 7

- To assess the care needs of the population
- To obtain sanitary authorization of a hospital
- To pursue performance indicators of public hospital management
- To create the necessary conditions for the provision of quality medical documents
- Develop a project
- Develop an investment project in hospital infrastructure
- To build a project team
- Constitute the project team of hospital infrastructure
- To coordinate a project
- To evaluate a project
- To manage any critical situations that may arise in the course

Respondents' comments revealed / restated the problem of little practice, reduced intake in building managerial skills, lack of hospital work experience, reduced ability to exchange expertise, adverse and uncontrollable work environment, and scholarly style approach. It was also reconfirmed that there are no courses on investment management.

Q1

(Quest. 2) For those who already are experienced managers, the courses were good; I grade those 4 on a scale of 1 to 4; for those with no management experience in, I do not believe *they were useful. There are no courses regarding investment management or how to attract investments.*

(Quest. 4) The SNSPMS behave as if they were "communist policemen": the presence is obligatory and they treat students as if they were kids. I also criticize the way examination goes.
On the other hand there is a need for such courses. A big advantage is networking with other doctors and hospital executives.

(Quest. 3) There was nothing made in SNSPMS regarding projects of management investment.
(Quest. 1) – In SNSPMS the theory is good but at a basic level. They don't actually teach anything practical there. All Directory Committee members have completed courses in SNSPMS.

Q3

(Quest. 5): I deemed it necessary (to take an investment course). A hospital investment is similar to any other investment.

Q4

(Quest. 3) Performance indicators don't actually indicate whether you are a performing manager or not.
(Respondent) was about to not pass the assessment because he had exceeded its drugs quota but he argued that there were serious unforeseeable causes. He had to explain and convince the committee that there were good reasons why he did not meet this indicator.

(Quest. 4) Performance indicators should be compared between hospitals of the same category. Do not compare my hospital with Titu hospital.

(Quest. 2) NA The contract was not signed. He does not know who will sign: County Council or the Ministry of Health. Indicators analysis reveals that those who have developed it have no expertise in hospital management and no fieldwork experience.

Other comments:

Questioner. 4

A manager should have a consultant role when coordinating an investment; he should indicate the way investment is made.

Hospital managers are not prepared to lead an investment project, so it's good that are not involved because their lack of knowledge can result to possible crimes.

Other institutions consider debatable that course effectiveness and quality of their results (training competitive managers).

(DSP – The Public Health Directorate)

Hospital managers that are physicians do not take time to consider issues of hospital management. They are always in a hurry, busy with other issues: going to symposiums, their personal offices and laboratories. Physicians are not prepared to be of hospital managers.

They do not want to know the legislation, but this should be one of their main duties. As to SNSPMS, teachers should be prepared previous to preparing others. Some of the trainers are there on account of their personal relations. There is nothing serious in that training though it all would be necessary.
DSP organized management courses with county hospital managers.

Hospital manager should be involved in any investment project of the hospital. He must lead such a project. If he does not get involved, nothing is done proper. He must check medical circuits compliance. The selection of the manager is not made with a sense of responsibility;

Some of the opinions reveal a lack of interest, a lack of involvement.

(DSP – The Public Health Directorate)

No one can say that it is not an incumbent that managers should be involved in an investment project. Such an excuse is unacceptable: "the buildings belong to the Local Public Authority so they are not my concern." A manager is the authority for expenditure and is responsible for all incoming funds.

SNSPMS courses are welcomed; however hospital managers are not interested in taking them. SNSPMS's role is very useful. Final evaluation should be more drastic. The manager should not only be interested in certificates.

As expenditure authority, the hospital manager should know the financial accounting legislation as well as a financial accounting manager.

Another problem of the managers is their teams. Managers may be prepared but their actions may be affected by the work of their teams. These teams should be more effective and responsible. This should begin with their job descriptions. There is a "staff ballast" in hospitals.

The manager must be actively involved in attracting funds and should maintain contact with the endorsers.

VI.8. Conclusions on the in Hospital Management Training in its Current Form

In 2004 the Report on Needs Assessment Research for Management Training of Medical and Non-Medical Staff for Reformative Measures Contrivance stated (in the introduction part) the needfulness that training programs focused on practice.

At that time, the report explicitly stated the proper management course approach (daily met stringencies when supporting a reformative process) as well as an appropriate structure (mainly practical aspects). It was also stressed that managers improved their decision-making process.

…….
In the context of accession to the European Union managerial and leadership training in health care providing establishments is an essential component.
…….
Providers of Romanian health system of all levels should have proper attainments in order to implement the reformation agenda.
Hospital managers and Head of Departments must be trained in basic practice management matters. Training programs must be mostly applied, with a minimum of theoretical background.
.....
Advanced Management Training - in financing, planning, decision making, contract negotiation, leadership (management), etc.. - should be designed to meet the needs of the current health system. Hospital managers must attain financing reformation know-how on Romanian health services and the way the whole healthcare system is influenced. Similarly, they should be aware of the way decisions are designed and contrived (for future activities).

These attainments represent requirements for persons in managerial positions in health care institutions. Participants who occupy (or aspire to) a management position should aim, at a personal level, at obtaining skills appropriate to their duties and responsibilities. In this regard, it had been expected that the training program became laboratories / spaces where decision-making within health care units is a proposal – testing – evaluation and adjustment process.

Most plausible explanation is that they chose a teaching style of and preparation of university curriculum (based on themes / disciplines and trainers' expertise) instead of one focused on solving current problems and the ability of lecturers to provide guidance on particular issues, so the type of advisory. The teaching method they adopted and the way they prepared the curriculum (similar to the university ones) replaced a method focused on solving current problems and a consultative manner on teaching.

SNSPMS has a consistent experience in organizing longer courses. The moment a shorter course was chosen, some modules were addressed in a theoretical matter. It seems that the course schedule was not re - designed and changed accordingly.

However, within the assessment process the prevailing questions target depicting the situation and getting to know the regulations. Little or no critical situation reasoning is researched in order to further resolve the matters in question. The assessment is based on "what theory, law and regulations state", less on identification / definition of "what actually is" and

not at all on the evaluation of "what can proper management improve". If managers' assessment process should verify decision-making abilities, one can say that current evaluation process rather verifies basic management language comprehension. Of course such a specific language should be promoted since management is such a different science, a completely different one than the medical one.

The problem lies in the fact that assimilation of a new language and verification are not sufficient. It is necessary to move forward and structure a way of thinking, to tackle the problems, to identify solutions and arguments. The next step is to contrive solutions, interpret feed-back and readjust decisions. In order for this process to be relevant to the student, themes should be interesting to future managers. Possible steps: a selection of the most concrete / current examples, work groups, public debates, transparent approach and adjustment of available or identifiable management tools (made by the trainers). It is also important that would-be managers take part in the defining and readjustment process of the curriculum. It would also be necessary that solutions suggested by trainers are applied and verified.

In other words, trainers' responsibility should also be extended to the practical domain the participants are being prepared for. Their responsibility cannot be limited to only awarding the students with a certificate, as they represent an organization that testifies managerial capacities of future managers.

Key findings on SNSPMS training

The general approach is to memorize notions more or less relevant to the managers' current position rather than training for solving a current problem the managers face with. The course strategy is mainly focused on theoretical approach and less on efforts designed to build and develop skills.

The trainer does not really practice management or a related discipline being relatively remote from hospital life.

Interactive methods introduced partial in the courses are difficult to be implemented unless the general teaching style is not shift completely toward interaction. Presently, the establishment of working groups and students' reluctance to interaction stand for two major obstacles. The trainers do not motivate participation but also because most students hold important positions or expect to and therefore their prestige reaction is quite high. There are two ways of overcoming this situation: team working and brain writing techniques when you want the students to be involved.

There are some trainers, who present the Romanian situation, but they do not stimulate thinking around the problem but expose their lecture in an unduly didactic way.

The hospitals do not network with other hospitals and there has been not noticed a concern, way of thinking, to interact transparently, sharing both achievements and failures. Considering that they are competing, they would think it a risky statement to disclose a mistake or to emphasize solutions.
In developing a teaching module, there is no practice to invite colleagues from institutes, hospital doctors or people with predominantly administrative positions of other institutions.

Interaction with current or former managers would avoid the excessive theoretical look, the often sophisticated build of the material, and the distance from daily concerns and last but not least the tight, unattractive format.

Within a training module there are obvious differences in styles and visions between the chapters indicating that each trainer writes a part of the course, according to his/her expertise, the course material being put together latter on.

The modules presenting the worldwide existed situations / problems don't customize the scenario according to the national context or specific hospital. Questioning the situations are definitely more supportive for students rather than just presenting.

To manage the hospital infrastructure projects is not clearly addressed in any of the 7 modules. As such, this theme's components (defining hospital investment, funding procedures, funding sources, investment bases) are neither directly nor indirectly tackled. Moreover, Hospital Management Course does not include a project management module.

Synthetically, the key problems of management training courses are*:*

- ***Pronounced Theoretic approach,***
- ***Limited Interactivity,***
- ***Questioned relevance of the examples,***
- ***Undersized practical part in relation to needs and expectations.***

A positive change could be made if they had set as objectives the following criteria:

- Development,
- Explicit content,
- Current and contemporary language,
- Practicality,
- A pragmatic level of content and form,
- Know-how / experience exchange,
- Organizing practical sessions based on interaction

Potential indicators of recommendation compliance regarding curriculum, materials, and presentations are:

Number of definitions per module,
Number of classifications per module,
Number of quotations per module (date, taken from…, level of expertise),
Number of laws in effect mentioned, recommended reading list,
Number of organizational rules mentioned, recommended reading list per module,
Number of tools, required forms in day to day manager activity,
Number of glossary terms,
Number of authors per module,
Number of authors outside the institution,
How many examples per text,
How many exercises per assignment,
How many exercises in class,
How many participations to work groups has each student,
How many specific instances of their hospital, in Romania or in other countries with related conditions are discussed during a course,
How many examples of good practice are presented and/or discussed,
Number of physicians and professionals consulted for the curriculum, evaluation method,
Number of articles, specific management publications available to students.

In addition to these quantitative aspects, it is also important to convey qualitative procedures:

- Getting beneficiaries of the course (potential and current) involved in the process of problem identification;
- Setting a consulting process with experts within and outside the institution and achieving consensus on the content and form of courses, sessions and teaching materials, teaching forms and assessment forms;
- Ensure communication and incorporation of the course assessment results;
- Public presentations of the management plans (by the students);
- Testing and assessing various ways of teaching (evaluative research) and their impact on students (qualitative techniques).

VII. CAPACITY OF THE HOSPITALS' MANAGERS TO ADMINISTRATE COMPLEX INFRASTRUCTURE PROJECTS

VII.1. Relevant managers' classification. Considering the responsibilities the managers have within an infrastructure project, there have clearly emerged two distinct types: (a) managers of hospitals where real estate belongs to the LPAs and (b) managers of hospitals where the hospital real estate belongs to the State and is under administration of MH. There are 372 managers in the first category and 40 in the second one[17]. The study is focused on the first category of managers, yet relevant observations are made for the second category when the context imposes it.

VII.2. Public Hospital Management Contract. The model of management contract was established by Order No. 922/2006 of the Ministry of Health. The Management Contract was concluded between the Hospital Manager and the Ministry of Public Health. The contract refers to the organization and management activities of the public hospital, set up indicators and targets involved in project management, in order to provide medical services and other services based on equity, necessity, effectiveness, quality and efficiency principles.

The Management Contract is signed for a period of 3 years, while an annual contract compliance evaluation and of the contained indicators is performed.

The duties of the hospital manager counts 56 and are categorized in activities: (a) Health services strategy, (b) Economic and financial management, (c) Performance / quality management, (d) Human resources management and (e) administrative management. Conversely, the manager's rights are only 10. From the rights / responsibilities perspective is not a balanced contract, at all. The low level of autonomy roots from this unbalanced situation and it may be instanced by the multitude of approvals the managers needs from Ministry of Health; as for instance:

- hospital development;
- to change the organizational structure;
- the list of investment and current repair works;
- the budget of the public hospital.

Regarding the infrastructure projects, the manager is the person who approves the list of works and investments for current and capital repairs. However, besides this approval, there are many cases in which the manager cannot make any other major decision in the project he approves. Then, the contract mentions the required approvals from DPHD but nothing about the LPAs.

Within the contract there are few provisions touching the infrastructure projects; the manager's responsibility to present quarterly and annually reports over *the patrimony given for administration* to the DPHD or MH. In the contract it is not specified what kind of patrimony. The buildings which are under LPAs ownership? Is this provision only for the managers where the hospitals belongs to the MH, meaning only 40 managers? Again, no word about LPAs. This situation may come because the contract was elaborated without taking into consideration the fact that the LPA is the owner of the hospital real estate.

In the present conditions when the role of the LPAs takes more consistency, it is a need to update the contract in accordance with and to bring more specificity in the responsibilities and rights the manager has within an infrastructure project. It is understood the contract parties are the MH and manager, but it shouldn't be supposed the LPA has no role within the hospital management. This lack of provisions have, certainly, an impact over the managers and are the best pictured in a manager's statement: "I cannot deal with the infrastructure projects, as this is not a task in my contract"; proposals on contracts modifications are more detailed in the section no. 20 of this part in the study.

> ***"I cannot administrate the infrastructure projects as this is not in my contract"***, a manager's statement reflecting the need for specification in the management contract

The contract includes the Performance Indicators, by through the manager's activity is evaluated. These indicators are classified into four specific groups as: (i) Human Resources Management Indicators (e.g. the proportion of physicians of the total medical staff, the proportion of total medical staff of the hospital staff), (ii) Services Use Indicators (e.g. number of outpatients, average time of hospitalization, average ambulatory room waiting time), (iii) Economic and financial indicators (e.g. budget application to approved expenditure budget, expenditure divided per services and depending on income, percentage of total own hospital income, percent of total capital expenditure), (iv) Quality indicators (e.g. hospital mortality rate, percentage of patients interned and transferred to other hospitals).

[17] *Note: There are considered only the units whose name are "hospitals" or "institutes"*

The evaluation of the manager's activity is performed is debatable and improvable, even if legally regulated (Order of the Ministry of Health (Order 112/2007 as amended by Order 264/2008, 341/2008 Order, Order 555 / 2008 and the Order 292/2009).

It is worth mentioning the evaluation committee's president for county hospitals is the Financial Accounting Director of the DPHD, whereas, the vice-president is the Head of the Internal Audit Compartment of the same institution. For the hospitals under the Ministry of Health, President is the Deputy General Manager of the Directorate of Budget and External Credit, in the Ministry of Health. In this regard, there might be supposed a special attention being in fact given to financial indicators vs. quality services and public health than supposed to be in a hospital. This assumed bias might be the cause for the revocation of managers in the 2009 evaluation: the non-compliance of economical and financial indicators represented 66% of the total.

In addition, the legal framework does not mention who should be a part of the evaluation committee, only that they are appointed by order of the Ministry of Health.

VII.3. Manager's role within infrastructure projects. Perceptions over. The contract concluded by managers with the Ministry of Health[18] doesn't entitle explicitly the manager with any responsibility on running the infrastructure projects. Empowered with the lack of such provisions, there are managers with LPAs buildings, which prefer to transfer the management of the infrastructure projects toward LPA, straight saying: "It is not my responsibility; the buildings don't belong to the hospital, but the LPA"[19]. This might sound like a convenient interpretation for the respective managers but they should go further with this reasoning:

- The managers are tertiary credit release authority through the same management contract and with this role it is their responsibility to administrate any fund received in their accounts as well as the assets. The funds from LPAs go in the hospital's budget and balance sheets and moreover, the buildings are registered in the hospital patrimony and the hospital records the depreciation of them. Therefore, it is manager responsibility to run the infrastructure projects;

- Between hospitals and the respective LPAs there is signed an administration contract, in which the hospital has the right for administration of buildings. In accordance with this contract, the managers are again responsible for running the infrastructure projects.

There should be mentioned that LPAs representatives consider also is their right to run the infrastructure projects as owners they are, even though they transferred the administration of these buildings. Why LPAs would accept taking over a task which is not their direct responsibility and even insist on take it over? Assumed motivations might be:

- Figured out a lack of capacity in hospitals and the LPA must fill this gap;
- The project process goes smoothly if the funding authority manages it,
- Applies a centralized management strategy (keep strict control over the activities in their area);
- Have decided to manage own funds in public procurements.

From a legal point of view, the consultant leans to state that it is manager's role to run the infrastructure projects. On the other hand, this role could be by-passed toward LPA with both parties (hospital and LPA) mutual agreement. Thus, LPA enters an infrastructure contract, which is transferred as a new investment to the hospital, then. Over the legacy of this method the consultant cannot presently decide, but the opinion is that as time as the administrator of the buildings is the hospital, then any project should be done through its command.

The ROP trough Axis 3.1 nominates the LPAs as being the applicants and assigns to them the projects implementation. The hospitals don't have a leading role in the application or implementation of the project, but the LPAs may decide to co-opt the hospital as partner.

The managers of the 40 national importance hospitals[20] are not in the same unclear situation regarding the matter of who is entitled to manage the infrastructure projects. *Through the same management contract, they understand and act as being the only responsible for running the respective projects.*

The manager in the private hospital doesn't have attributions on infrastructure projects. He is responsible only with managing the operations, with focus on medical activity. The infrastructure projects are conducted by a logistic department which is

[18] *Order 922/2006*
[19] *Source: consultant survey*
[20] *These hospitals are under direct subordination of MH and the buildings are under the administration of the same ministry.*

subordinated to the Administrative Council. The manager is requested to provide advice in infrastructure needs assessment, in certain parts of design, in outlining the required resources to implement and make the supposed project operable.

In the survey, the interviews had with the representatives of the stakeholders revealed up certain perceptions over the managers' role in the infrastructure projects. Even though, one cannot be stated these perceptions are common for all the institutions part of stakeholders' categories, their incidence mark a certain trend. *LPA perception* is that the manager shouldn't have a leading role in running an infrastructure projects. The manager should just inform the LPA over the needs for investments and provide advice in certain area of the projects. Regarding the leading role the LPAs are assigned within the ROP Axis 3.1, it is a complete consensus over, since only the owner could be the manager of the project.

DPHD perception views the managers being directly involved in administrating the infrastructure projects; otherwise the project may be a failure. Moreover, a DPHD representative emphasized the need for the managers to lead the infrastructure projects, as they are directly responsible for the funds received for hospitals infrastructure. *Managers' perception* varies from "a deeper role in the administration of an infrastructure project" to "no role in such projects". The prevailing opinion is that their role would be to delegate the project administration to hospital departments entitled to run the investment or to designate a project chief, who reports to the manager. On the other hand there are voices which say that the running of a project is not their task but the LPA; therefore, their role should be the one of an adviser on project overall structure and initiator of the investment.

Between what managers would prefer to have for a project management and how it is actually implemented this preference, it is noticed a sharp difference. Except for the hospitals under MH, few managers administrate the projects implemented in their hospitals; generally, the contracts with constructors are entered by LPAs. It is a practice among many managers to let / transfer to the LPA the running of the infrastructure projects for various motivations. A general shape over the each stakeholder's perception on the role the manager should have within an infrastructure project is revealed from the survey and in the figure no 6, below, there are presented these perceptions. There are two main roles in this discussion: should the manager have the leading role or just a secondary role as an adviser in design? The opinion of the managers is split among the two roles, yet is stronger biased to an adviser role. The practice within the private hospital is considered, too.

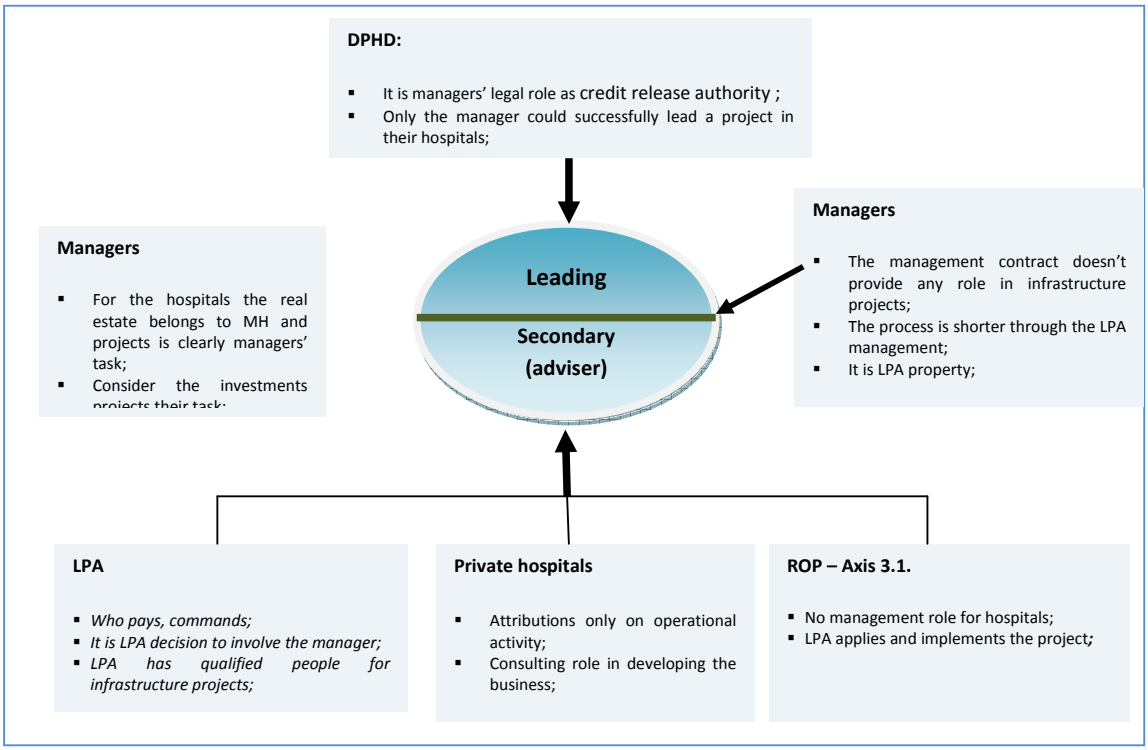

Figure 6. Stakeholders' perception and arguments over the managers' role within infrastructure projects

Being a project manager implies to coordinate or to execute the tasks associated with each phase of an infrastructure project. The managers interviewed were asked to indicate 3 project's phases where they are the most involved and which

are 3 phases where they are the least involved. The answers where summed up and, the phases nominated in the first category where granted a plus and each frequency in the second category received a minus; the results are presented in the figure no 7 (below).

Phase 1 – Investment needs assessment is a phase where the manager play an executive role and as the survey results show, it is the phase where managers stated are the most involved. To fulfill this role one is required from him:

a) willing to start a project,

b) vision and technical knowledge – if a manager doesn't know where his hospital should reach, new technologies in place and medical circuits of the project, then his assessment needs might not be appropriate for the hospital.

c) knowledge of financial needs – the two capacities above may be in vain if a manager doesn't roughly know how the presumptive investment is translated into money in order to afford the investment.

Phase 2 –Funds identification is perceived by managers as a phase where they are involved and their presumptive role is executive. To administrate this phase it would be required to:

a) Know the procedures of the potential funding bodies, namely Ministry of Health, DPHD, LPA, ROP, etc.

b) Keep strong collaboration with LPA, MH and DPHD, but emphasizing over the LPA in the cases where the real estate belongs to them.

The managers' involvement in this phase is considered as very high, usually when the managers intend to start an investment they think about the potential funding sources.

Phase 3 – Budget development would require coordination from a manager; the managers' perception over this task is considered as neutral. The financial knowledge and the legal framework are not among the managers' strong points being assessed as "very low" in the section 4, below. The financial staff of the hospital is assigned with this task or the LPA when is agreed accordingly.

Phase 4 – Tender procedures for design documentation is not under the interest of the managers, at all, as their common opinion indicates it, being ranked in the last position as in the Figure no. 7 (right). As a project manager, their role should be as a coordinator of. Regardless the funding source or the construction works is under an LPA contract, the hospital generally contracts and pays from own funds the completion of the design documentation. This task is under the coordination and execution of acquisition/administrative or technical.

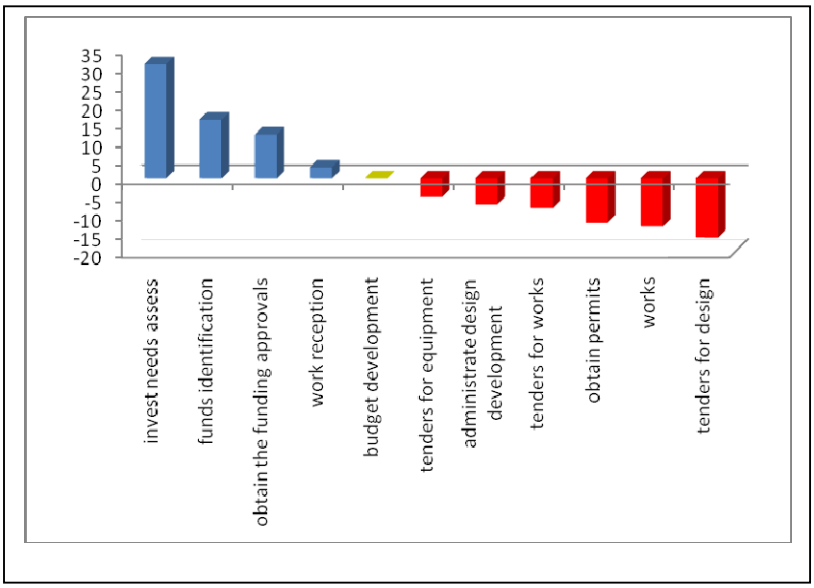

Figure no. 7 – Managers' involvement in the project's phases
(Source: Consultant's survey)

Phase 5 – Administration of design development represent another phase where the managers' involvement is low, the task being transferred in the same departments as in the Phase 4. The design development is contracted to a specialized company but the design process should be assisted by hospital representatives to ensure the right processes are followed. It is a practice the manager advices the designer in respect to certain characteristics of the design but not to an in-depth level.

Phase 6 – Obtain the required permits is not under managers' responsibilities and usually it is part of the administrative / technical departments. In accordance with the contract, the design company might be delegated with this task.

Phase 7 – Tender procedures for equipment takes a low involvement from managers, being transferred to the administrative/technical or acquisition departments.

Phase 8 – Tender for construction works in many cases is taken over by LPA, the hospital's role being consequently, reduced as shown in managers' responses in figure no 7.

Phase 9 – Obtain the funding approvals stands for phase where managers fills major roles in projects' practices. It is their role to contact higher position representatives of MH, DPHD or LPAs to facilitate the approvals for funding: investment budget, justification note, investment list, feasibility study.

Phase 10 – Construction works encounters a pretty low place within project's phases, considering its importance; it is the result of LPA part in such contracts and not the hospital.

Phase 11 – Works reception is under their tasks but not as important as one could expect.

VII.4. Capacities to manage a hospital infrastructure project. In assessing the public hospitals managers' capacity to administrate infrastructure projects, there has been considered the importance of the context and the complexity of the issue at hand, i.e. hospital infrastructure projects. In analyzing the managers' capacity, the consultant uses the contextual approach, which focuses on the basis of contextual variables and the correlation between the manager and the given situation. The Contextual approach regards the assessment of leaders' characteristics, assessing the situation based on the main contextual variables, establishing correlations between the leader and a given situation.

In the analysis, an important focus upon the following determinants of these capacities:

- The capacity to collect, verify, analyze, synthesize and interpret (quantitative and qualitative) internal and external information and data regarding hospital infrastructure projects, from different, relevant sources;
- The capacity to coordinate the specific stages of hospital infrastructure projects;
- The capacity to acknowledge, analyze and improve hospital's activity during the implementation of investment projects;
- The capacity to take the necessary decisions;
- The capacity to analyze the internal and external environment of the hospital and to choose the best development strategy for it;
- The efficient management of human, material and financial resources of the hospital;
- Knowing the specific legislation regarding hospital infrastructure projects;
- The capacity to assess and control the activities within hospital infrastructure projects

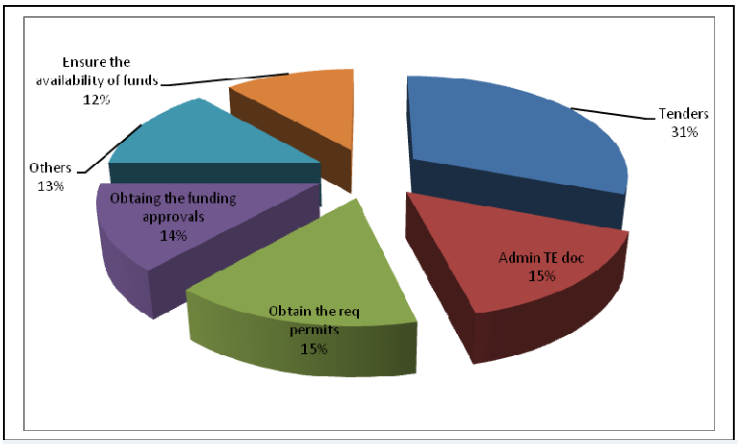

Figure 8 – Managers' perception on the most time-consuming project's phases
(Source: Consultant's survey)

The context analysis supposed to assess the managers' capacity to administrate the infrastructure projects through a serial of factors grouped in: (a) personal factors, (b) organizational factors and (c) external factors.

In order to assess his capacity to coordinate hospital infrastructure projects, we must consider the requirements imposed by these projects, as in Figure 9, below:

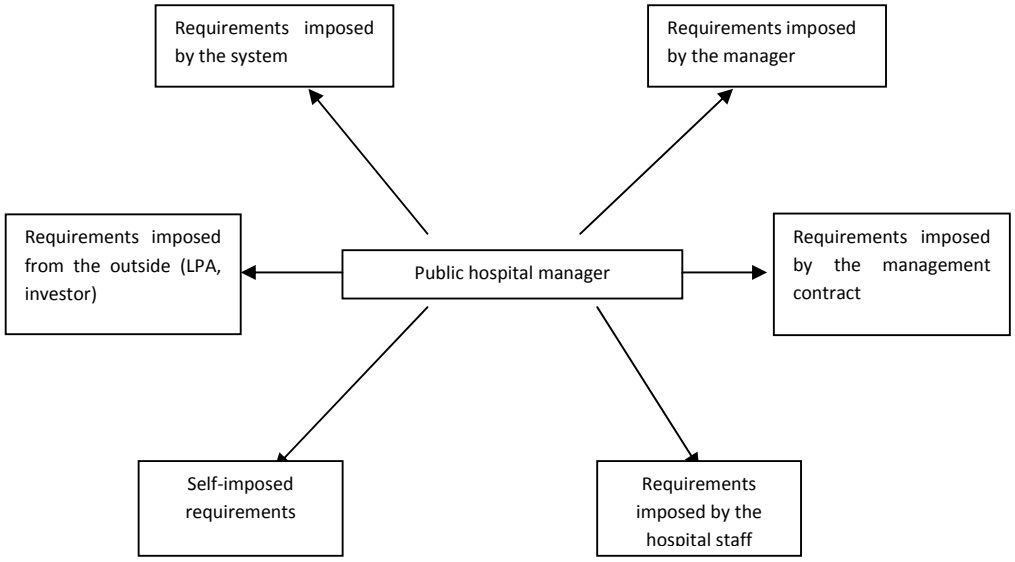

Figure 9. The requirements that influence the capacity to coordinate hospital infrastructure projects

These requirements influence the capacity to coordinate hospital infrastructure projects.

Requirements imposed by the system:

- Buildings belonging to the Ministry of Health – a certain model of obtaining and implementing the investment;
- Buildings belonging to local public authorities – another model of obtaining and implementing the investment;
- Lack of an Investment plan in hospitals at national level;

Requirements imposed by the manager:

- What the public hospital manager expects from an infrastructure project: better medical care, optimizing the contract with NHIH;

Requirements imposed from outside:

- The public hospital manager must follow certain requirements and specific aspects of this type of project when collaborating with the designer, construction company etc.;

Requirements imposed by the management contract:

- The manager is the only one responsible for the smooth functioning and organization of the hospital's activity;

Self-imposed requirements:

- Things that have to be done according to regulations and standards taken on by the managers for the functioning of the hospital they run;

Requirements imposed by the hospital staff:

- A hospital infrastructure project begets disturbances of lower or higher degree in the daily activity of the hospital, thus the staff can become displeased and unmotivated and can even withdraw its support for the said project.

Besides these requirements there are constraints – both internal and external factors – that limit the liberty to make decisions regarding the hospital infrastructure projects.

These constraints include:

- Limited resources: including the type and amount of resources (funds, personnel);
- Legal requirements;
- Procedures for licensing and accreditation;
- Investment policy in hospitals;

Hospital investments are complex processes and these have to be planned carefully. These investments need to be in close relation with the hospital services demand. It is not a facile to forecast hospital demands precisely, as this forecast depends on four key factors:

- demographic pattern,
- medical technology advance, which is historically attributed with reduced length of stay and therefore a reduction of required bed capacity,
- epidemiological pattern, driven for example by life-style changes, which can lead to reduced demand (no-smoking policy) or increased demand (obesity),
- regulation and policy.

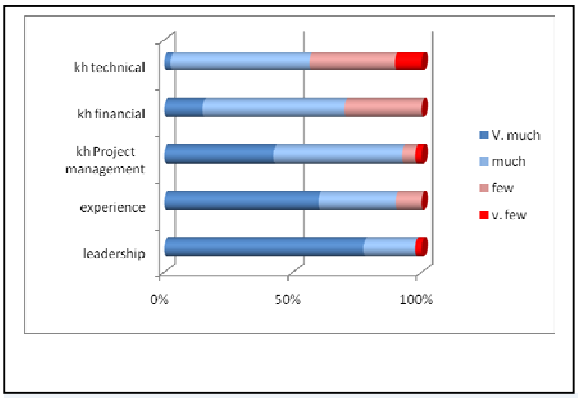

Figure 10 – Managers' view on the general required capacities to run infrastructure projects (Source: Consultant's survey)

To help with hospital planning, there is a need of a better understanding of the range of possible future hospital demands by taking into account of combinational effects of these key factors.

There is a need of a longer term direction of the investment program in hospitals which requires a degree of flexibility if it is to respond to the rapid changes in the health system. Capability to implement rapid change is also essential from the point of view of the introduction of clinically relevant technological developments. Investments in hospitals have to take into account the present and the future function of these health settings and to be adjusted to the real needs of the population served. The manager is the person who should know the pre-investments factors and should figure-out the amplitude of the future infrastructure project. Definitely, he should be the one who initiates the infrastructure project.

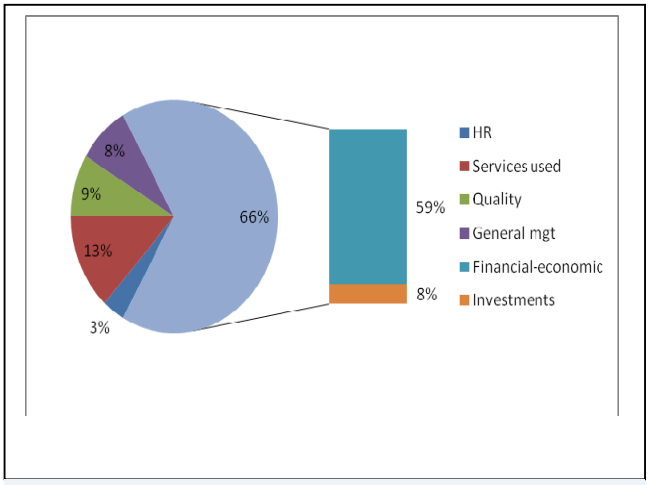

Figure 11 – The prevalence of performance indicators which led to managers' replacement in 2009 (Data Source: Ministry of Health)

The capacity to administrate an infrastructure project was assessed through several factors identified by consultant:

- experience,
- project management knowledge,
- financial knowledge,
- technical knowledge,
- leadership,

Over the importance of these factors in project management, the consultant asked the managers interviewed in the survey to present their perception. In the managers' view (charted in Figure no 10), the leadership and the experience are the most important qualities a manager should have in order to properly administrate an infrastructure project; then the Project Management know-how is other capacity which fills an important role. Whereas, the first two cannot be obtained through training, the third one present premises for the future development of the managers' skill to run these projects. Even though the technical and financial knowledge are not highly perceived as important, both of them show rather importance than the lack of it. Is there the perception of their importance much different than the existence of these qualities in the managers? The answers is given in the following paragraphs.

Leadership. The trait theory (*Shelley Kirkpatrick and Edwin A. Locke, 1991*) assumes several major characteristics which form an effective leader, of which some of them could be measured in the present study: (a) achievement, (b) motivation, (c) ambition, (d) energy, and (e) knowledge of the business.

a) *Achievement* permits a larger self-confidence, attracts the superiors' praise, impose respect and motivation to the respective manager's staff. The achievement might be related with other general capacity, the experience, but the achievements represent only the visible and successful part of the experience. The managers' achievements are measured through the following methods :

(i) *The performance indicators in their contract with the MH*[21]*;* the limits of these indicators are compulsory in case the manager intends to fill this position when annual evaluation comes up. As regards the performance indicators specified in the contract, there is a single performance indicator which provides a kind of evidence over the managers' achievements in the field of infrastructure projects: "The rate of capital expenses in total". Yet, this indicator is not so objective, the managers don't have too much influence in attracting the capital funds from MH and LPA; primarily, because there is no criteria and transparence in who is entitled to receive the relative limited funds for investments these institutions provide to hospitals. In the 2009 evaluation, 73 managers lost their positions since they didn't meet the values of the performance indicators being set up in their contracts; out of the total number of managers evaluated, they represent 24%[22]. The management contract includes five types of performance indicators concerning: Human Resource, Services Used, Financial-economic, Quality and General Management indicators. The indicators which largely determined the managers' replacement were the financial-economic ones, representing 66%; out of the total indicators responsible for these replacements. The indicator regarding the investments is part of this category and its non-fulfillment determined the dismissal in 13 cases (see Figure 11).

(ii) *The infrastructure projects* they have managed and particularly, they completed in order to check the acknowledgement of their achievement. Any observer could, broadly, notice the general picture over the hospitals' infrastructure doesn't permit to the large part of managers to claim important achievements. The funds allocated for investments in the last period – either by MH or by LPAs – have given only to a reduce part of the managers the chance to check this indicator. As regards the MH, the funds traced a sharp decreasing trend[23] a main reason being the transfer of the hospitals' real estate to the LPA since 2002. The LPAs have begun to invest funds in their hospitals[24], yet many projects are contracted and managed by LPA, therefore, these achievements cannot be awarded to managers.

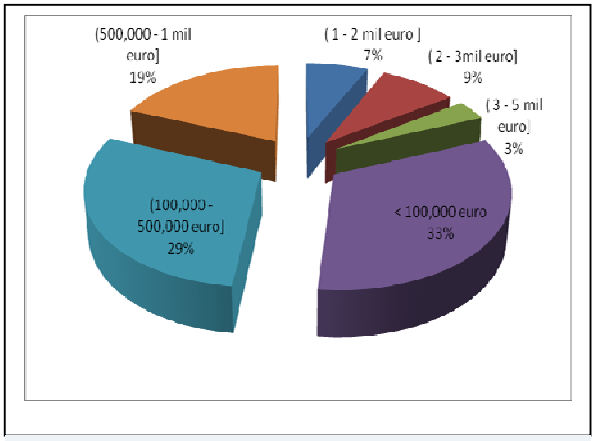

Figure 12 – The infrastructure projects' value carried out in the hospitals (Source: Consultant's survey)

The complex infrastructure projects involves more consistent budgets, being assumed that such a project should have at least a budget with two figures in millions of euro. The feasibility studies contracted by the MH for the 15 hospitals to be rehabilitated through ROP were initially summing up at least 100 mil euro for each hospital. Do the managers record such achievements? What about for at least 10 mil euro? The results of the survey present the picture of the managers' achievements as in Figure 12. The great majority of them - 81 % - haven't administrated in any respect[25] projects over 1 million euro; moreover, 1/3 of the projects are less than euro 100,000. No project finished over 5 mil euro!! The involvement

[21] *The evaluation is performed in accordance with the provisions of the Orders 922/2006, 112/2007, 1490/2008*

[22] *Ministry of Health press release, 5th of May 2009*

[23] *See 1st Report of the project, section IV.4.*

[24] *See 1st Report section IV.5.*

[25] *It should be mentioned the projects nominated by the managers are not implemented only by them, LPA filled an important role in.*

of the LPAs in the projects' management with or without the agreement of the managers might seem justified from this point of view.

Except for very limited cases, *there is no managers' achievement in complex infrastructure projects*.

b) *The motivation* of a manager to administrate him/herself an infrastructure project is determined by factors as:

(i) Money incentives – there is no evidence the managers would benefit of a salary increment or bonus in case he/she initiates and/or concludes such a project. No motivation determined by this factor.
(ii) Preserve the position - Activity evaluation presents an indicator which regards the investments: "The capital expenses / total". Non-compliance with the limits set up for this indicator may lead to the manager's replacement. This factor may determine motivation in managers to act for attracting infrastructure funds. The incidence of this indicator in the 2009 evaluation represents 8% of the total indicators. However, it is not quite in the hands of the manager to attract capital funds; the next point broadly argues over the relative incapacity of the managers in this action. Low motivation determined by this factor.
(iii) Notoriety – it may look like a touchable motivation for managers to be determined in attracting infrastructure funds and administrating the projects. A successful project may bring up large appreciation and acknowledgement on local and national level. Such a manager is harder to be "moved" from his/her position. A manager remarked that: "in order to succeed with the projects it is required a good relation with mass-media". The bias toward notoriety and abilities to be a notorious person is rather a rare characteristic, so its level in determining motivations for infrastructure projects tends to be zero.
(iv) Compulsoriness – in reaching certain standards for future hospital's accreditation, health permit, environment preservation; the managers pointed out they were obliged to pursue with certain projects as a necessity to meet certain hygienic or environmental conditions; on the other hand, it is worth to post what a manager replied; he had no money to initiate certain compulsory projects, but he knows that the importance of the hospital cannot let the closing of the hospital. This factor represents a high leveled motivation.
(v) The project duration it is another contra-motivation and the experience the managers faced with previous projects and relative low-valued projects are not an incentive to proceed with more complex ones. Besides, the managers mentioned as pretty time-consuming the bureaucratic steps of the project and related office-work rather than the implementation of. The public acquisition procedures ranks as the most required in improving the regulations.
(vi) LPA involvement confines the managers' motivation in undertaking the projects both in some cases by taking a "burden" from managers with their own consent and by simply not permitting the managers to deal with LPA's property.

Summing up the evaluations of each factor constituting the motivation, one may be assumed, for time being, the motivation plays an insignificant role in determining the managers to launch and conduct infrastructure projects.

c) *Ambition/ willingness* to have a modern and representative hospital may drive managers in improving the hospital infrastructure. Within the study this factor was partially quantified through the projects the managers planned for 2009 as well as through the application for ROP funds. Thus, regarding the first indicator[26], except for a single manager, all the rest have infrastructure investment plans, this result showing a willingness to continue with infrastructure project; the value of the projects announced are in the limits the respective managers have been used with.

The survey indicates the manager with success in launching infrastructure projects is:

- ***Gender :*** *Man,*
- ***Age:*** *30 - 40 years old,*
- ***Profession:*** *Doctor,*
- ***Region:*** *NW*

d) *Energy* – it is a factor analyzed by using indicators which may show evidence of such a resource; it is examined through the projects the managers developed against their age, gender, professional background and region. Definitely, other economical, political and social factors determined or constrained infrastructure projects but the consultant attempts to check the hypothesis of the energy's impulse in such projects. It is commonly accepted, the

[26] *the question was addressed only to the managers interviewed face-to-face*

energy may vary in accordance with physical and psychic factors; in the present study there are used the age, gender, professional background and regions, the last ones being considered sources of mentalities determining the psychic energy.

In the Annex XI is detailed the values of the mentioned indicators. The results strongly confirmed the age as a driving factor of the energy; thus, the infrastructure projects with higher values are launched by the young managers. Another obvious correspondence is between region and infrastructure projects. Prevailingly, the regions with more important projects are North-West, Bucharest – Ilfov, South-East and West. The applications submitted to be financed through ROP indicate the SE and NW regions as the most active ones, representing almost half of the total applications by June 2009 and 60% of the total amount requested in financing. These regions reiterate the role they have in economical development of the country. For the sake of the statistics, other correspondences emerged, even though their rationale may strongly depend on other factors. The men administrated higher value projects than the women did; the doctors administrated higher value projects than managers with other professional background did – this results might be explained trough the fact other professions were allowed to be hospital managers for 3 years ago and their share is not concluding.

Quantifying the energy, one's been depicted a portrait of the most successful manager in launching infrastructure projects would be a man, doctor, up to 40 years old and working in North-West Region.

The appraisal of the energy factor it was assumed as being relatively high with room for improvements.

e) *Knowledge of the business* – gives larger confidence among the collaborators a manager has in the hospital, especially among the medical staff. One is could be assumed that a manager doctor knows much better the clinic processes within a hospital and may attract a larger cooperation behalf medical subordinates. This qualification needs to be completed with the management knowledge and skills. On the other hand, sometimes one has been proved that an out-of-hospital management perspective may provide a better understanding of the required improvements and processes needed for hospital activity optimization.

The managers' evaluation in 2009 showed the managers present a consistent knowledge gap in the financial-economic part; around 66% of the managers replaced didn't meet the requirements of these indicators. The medical knowledge is assumed to be evaluated through the categories: quality of services and service used which counts around 22% of the managers' replacements. In the total number of the managers, the doctor profession holds for at least ¾ of the managers.

Following the appraisal of each factor in which leadership consists of, one could conclude this capacity – the leadership - is not strongly shared among the managers.

Experience – in terms of infrastructure projects administrated. The managers' evaluation encountered for a more transparent method since 2008, when it was applied the application of the new rules. In 2008, this evaluation carried out by the MH led to the replacement of 32 managers, which added to the 73 replacements done in 2009, count for 25% of the hospitals may have managers with low experience in hospital management and, consequently in administrating hospital infrastructure projects. In the survey panel, 8% of the managers hadn't administrated any investment project.

Considering a complex infrastructure projects would amount for at minimum of 1 mil euro, one could assume in Romania, the complex hospital infrastructure projects have been largely missing in the last period. Moreover, at least a quarter of the managers have low experience in hospital management, as being new replacements and the older ones have almost no experience in administrating complex investment projects since these projects have almost missed. Projects valued between 3-5 mil euro were administrated by 3% of the managers. The experience the managers have for last years in low value projects might represent a limitation in undertaking higher value ones. Unless motivated, few managers would go further on an "unknown land".

Project management know-how. Concerning the project management, the managers interviewed tend to delegate this responsibility either to the relevant departments of the hospital or to assign a project manager for it. The completely administration of the project ranks for the third place, followed by the opinion to let the LPA with project management. As a consequence to these opinions, the know-how on project management might be obstructed by their beliefs on whose task it should be.

The managers were asked to mention 3 recommendations for their colleagues in other hospitals regarding the infrastructure projects. In the total number of recommendations, two of them refer the must dimension in any performing activity: *competence and motivation*. This result would be banal unless considering the projections in these recommendations of the own gaps and deficiencies. For the specialist in social research, *the projective character* of these recommendations is

obvious: the present managers recommends to a virtual manager *to do* and *to have those things they feel they miss* (or to those around them).

If we rely on the postulate of social psychology in accordance with the recommendations for the Other being, hypothetically or effectively, in a similar situation reflects the own problems and discontents, it results that:

Often, the problems to which the managers face are:

- The ***insufficient competence*** of hospital managers in regards to launching and developing infrastructure projects;
- ***The lack of a higher motivation of the supportive staff,*** **to whom the managers collaborates in launching and developing the projects** (a motivation which overruns the selfish interests and targets the common good;
- ***The lack of consistent support*** behalf the real estate owner;
- ***The insufficient competence of collaborators*** (project team members).

Against their background, the doctors in the management positions blame - more than the other backgrounds – the tenders, as being the phases the most time-consuming. The doctors perception was predictable, as time as this activity keeps them far from the medical service, without exchange this with any professional

satisfaction; the feeling of "loosing time" is almost unavoidable. On the other hand, it is possible this "tenders phobia" to emerge out of the lack of specific competences pr because of the huge level of bureaucracy is the real determinant of this perception over.

- The managers blames **the excessive bureaucracy of procedures in obtaining the financial approvals, as well as the excessive bureaucracy of tenders;**
- **The managers doctors are complaining the most, regarding the time consumed by tenders;**
- The most proposals made by managers envisage **a more flexible regulation of tenders and the simplification of procedures to obtain the funding approvals.**

The managers recommended to their fellows several actions to be taken when is to administrate an infrastructure project. Almost 60% of the recommendations made by managers envisaged actions whose results depend in a broader share on external factors, as the following:

- Collaboration with a consultancy company;
- Obtaining the LPA and political support;
- A competent team;

Additionally, there were recommendations whose effect depends directly on manager:

- Knowledge in feasibility studies and public acquisition;
- Knowledge in project management;
- Set up realistic objectives.

In the interview had with the manager who carried out the most complex projects registered in the study (and he might be the hospital manager with the highest number and value of infrastructure projects in Romania), it was re-affirmed the manager's role in an infrastructure project, as being confined only to the initiation, funds raising and delegating the project to a qualified team.

One could state the managers' belief is that project management is for the second level management.

Financial knowledge. At the first contact the consultant had with the manager of an important hospital known for his achievements, one of his main statement was: "We, the hospital managers lack an important point: we don't know to draw up a budget! And this budget should be an important issue in our activity!".

A DPHD representatives came with a same argument: "the manager should know the financial and fiscal legislation as well as a very good financial director".

The budget development is not a project phase which managers consider it is a priority. When they were asked what are the phases where they are most involved, only 7.14% indicated they are involved in budget.

In administrating an infrastructure budget, the managers showed that the financial knowledge counts "few" for 1/3 of the managers, "much" for 55% and "very much" for 10%.

It seems like the managers cannot have a major role in administrating an infrastructure project' budget as time as a supervision contract exists; neither such a role in the projects contracted directly by the LPA. Therefore, this role cannot be extended to more than a general monitoring. Regarding the capacity of the managers to administrate the investment budgets definitely depends on the project's value. More than 80% of the managers had projects of less than 1 million euro and over 30% of the projects meant only equipment acquisition. Regardless the managers' opinions, one it may be stated their capacity to administrate the budgets of complex infrastructure projects is low: no experience, lack of financial knowledge and on the top is the fact this role is generally taken over in the present by the LPAs and the supervision companies.

Technical knowledge meant in the consultant's view, the managers' knowledge over constructions and equipment. Definitely, there are not envisaged detailed engineering knowledge, but overall knowledge and information on general trends and general characteristics of. A manager wouldn't know where to reach with his project unless he is informed about new techniques, standards and modern approaches.

In the five characteristics a manager should have in administrating a project: leadership, experience, project management know-how, financial knowledge and the technical knowledge, the last is considered with the lowest importance in the managers' perception.

There is no approach of such a topic within SNSPMS. It is likely the managers lack such knowledge and news in. Self documentation and participation in seminars held by medical equipment dealers might add some luggage. When one looks at the infrastructure projects implemented around the hospitals, there would be no surprise in finding the managers' interest for this knowledge in a lower degree as this knowledge rarely could be put in practice. A manager could visit modern hospitals to acquire knowledge over new processes and technologies but the lack of funds when coming back may prove acquiring this kind of knowledge to be in vain.

In addition to the general management capacities, within the survey, the managers identified themselves a series of specific capacities which are required in order to develop an infrastructure projects:

- *Rigorous planning* of the investment projects;
- Coherent coordination of staff;
- Develop strong interpersonal links with the representatives of real estate owners and press;

VII.5. Internal organization in hospital and LPA to implement projects. The overall hospital organizational structure consists of administrative and executive parts, being led by the hospital manager. The administrative part is made of: The Committee of Trustees, the Ethic Council, the Medical Council, the Scientific Council and the Consultative Council. The executive part implements the decision made by the manager and the administrative bodies and is made of the following departments: Medical, R&D, financial, administrative and HR.

The hospital's manager is appointed by minister of Health after won the competition for the respective position. The manager' activity is yearly evaluated by DPHD in accordance with the performance indicators legally established.

The Committee of Trustees is made of the hospital manager, medical director, the chief accountant, the administrative director, HR director as well as other chief units in accordance with the organizational structure of each hospital. An exam is organized by the hospital manager for each of the positions.

The main responsibilities are:

- elaborates the development plan of the hospital, based on the medical council proposals;
- elaborates the annual plan of medical services based on the medical council proposals;

- proposes to the manager the personnel structure and the organization of exam to fill the vacant positions;
- develops the draft budget and submits it to the manager;
- monitors and reports to the manager, the specific indicators for the medical activity, financial, economical as well as other data regarding the activity of surveillance, preventing and control.
- develops and reports to the manager, the annual plan for public acquisition, investment list, maintenance and major repairs;
- negotiates through the manager, the medical director or the financial director the contracts with NHIH;

The Ethic Council is made of 5 members for a period of 3 years, under the following content: (i) a doctor with the highest university degree which is the president of this council, (ii) an LPA representative, (iii) care director or chief nurse, (iv) a DPHD representative, (v) a secretary with no vote right. The appointment of the members is done by the Committee of Trustees.

The main attributions of the Ethic Council are:

- checks the patients' rights are followed by the medical personnel activity;
- analyses the patients' complains;

The Medical Council is led by the medical director, being appointed by the manager, as a result of an exam. The other members of the council are chief units, chief labs, chief pharmacist and chief nurses. All these positions are filled as a result of an exam.

The major responsibilities of the Medical Council are:

- to improve the medical practices standards;
- monitor and assess the medical activity in order to increase the professional performances;
- develop the acquisition plan of the hospital;
- strengthen the financial procedures.

Scientific council is led by a director. Its tasks are to be defined by the Ministry of Health.

Consultative Council has the role to debate the major issues regarding the strategy, the organization and operation of the hospital and to make recommendations to the manager, as a result of the debates. The members of the council are (i) 2 representatives of MH or DPHD; (ii) 2 representatives of the LPA, for the hospitals under LPA real estate; (iii) the manager, (iv) 2 representatives of the Medicine University in case of Clinical hospitals, (v) 2 representatives of business sector, appointed by the area patronages, (vi) representatives of the hospital union. Ministry of Health approves the member list of each hospital, after each institution appoints the representatives within the Consultative Council.

Commonly, within the hospitals, the project's implementation task is assigned to technical / administrative department which reports to the manager and collaborates with relevant departments in accordance with the subtask to be fulfilled or depending on the internal organization, which is not the same for all hospitals. Other departments which are involved in implementation are: public acquisition, financial and legal department. Even though the managers embrace the idea of appointing a project manager, this is not a practice; the hospital managers, in general, transfer the implementation of a project to the relevant departments.

In regards of the LPAs, the executive part of the implementation of a project is generally under the responsibility of the technical department and the coordination may be under departments as: "Programs", "Regional Development" or "Investments".

VII.6. Availability of in-house – technical, legal, administrative- expertise. Hospital managers involved in the case studies had different answers regarding the availability of the support within the hospital in implementing infrastructure projects: all eight responding hospital managers stated that the hospital has technical and financial expertise, but only four mentioned also legal expertise. The personnel in any public institution take advantage of a kind of immovability, regardless its performance. Strong support from the unions, labor legislation and present political parties which either the doctrine they have sustained and developed the state budget employees sector represent factors which have led to this immovability. Anomalies like the increasing of budgetary personnel (35.000 persons more in 2007 than 2006)[27]or salaries with an average

[27] *Source : National Institute of Statistics*

of 65% more in state sector than private sector[28] are normal in present times. Within a hospital, only the manager is the one who is evaluated and could miss his position in case of non-performance in keeping with his management contract; all the rest are defended by the Labor Code. Consequently, there is no surprise the survey indicated the managers consider the second major problem in administrating an infrastructure project is "the inadequate human resources", being after the expected "insufficient funding". In completing this opinion, the DPHD representatives mentioned the ballast staff within hospitals and the need of a team around the manager in order to succeed in his projects.

The manager has almost no chances to replace the inadequate staff. Therefore, their most important recommendation made for their colleagues in order to properly administrate an infrastructure project is "find a consultancy company", which stands for 22% of total recommendations made. Externalize the expertise is one of the solution they may have to find it in settling the problem they have with the inadequate personnel. .

In this regard, several concluding examples were brought up by the managers interviewed:

"I need to make decisions, which should be legally endorsed. I cannot rely on my legal department"

"I have a retired surgeon and I want to replace him with a good young one. I can't do it because the retirement decision hasn't come for 2 years and legally I cannot let him out by then".

"A doctor was constantly coming drunk in his section. I dismissed him. In few days I received a citation from court and following the trial I had to re-hire him".

"Develop and keep informal links with local authorities" – frequent recommendation managers did to their colleagues in attracting infrastructure projects.

On the other hand, as time as the hospitals don't completely take over their attributions in managing the projects and LPA still replaces them in this task, then they cannot have competent teams. Better positions, in this respect, are filled by the hospitals with real estate under MH, where the managers had to train the staff since there was no other support as the others had from LPAs.

VII.7. Existence of possible technical support from Ministry of Health. Among the managers interviewed, the common opinion regarding the technical support from Ministry of Health was synthetically expressed in the statement of a manager:"The role of the MH is to be a policeman". MH doesn't provide technical assistance within an infrastructure project having no department specialized in such activity, yet there were cases when the DPHD fills such kind of tasks. In Sibiu, the DPHD was required to approve an investment which was appraised by DPHD as overestimated in costs. When DPHD analyzed in depth, it was revealed the technical solution to be adopted was indeed an expensive one. The DPHD came up with a new technical solution, which was eventually implemented.

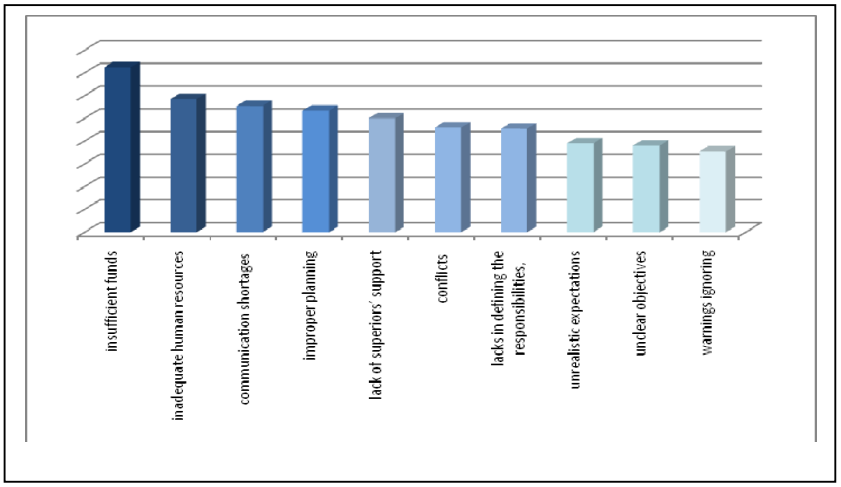

Figure no. 13 – Rank of the problems in the management of project.
(Source: Consultant's survev)

Considering the role the DPHD has as the issuer of sanitary authorization, which involves the approval of the technical solutions and medical flows, there might be concluded that the DPHDs may play a role in technical support but the evidences indicates either this role cannot presently come but in the control phase.

[28] *Source : National Institute of Statistics*

Within the MH there was formed a Technical Economic Commission whose role is to approve the applications submitted for obtaining funds through ROP Axis 3.1. The commission has no other role within the MH and its activity is temporarily.
Once the management would be transferred to the LPAs, there might be a need in keeping and extending the responsibilities of such a commission, to provide consultancy and approve complex infrastructure projects, to assess the opportunity of extending or downsizing certain units, mergers and divisions.

VII.8. Lack of transparency and low predictability of the funds allowed through Ministry of Health and LPAs doesn't encourage the managers to apply for funds and actually they don't know the criteria they should meet in order to be entitled to receive infrastructure funds. A particular answer in the survey was a recommendation the managers gave it to their colleagues when it is about infrastructure projects: "Develop and keep informal links with local authorities"; out of over 20 types of recommendations, this one ranked on the second place in terms of frequency and it could have been much higher but definitely, some kind of moderation kept apart the managers who self-filled the questionnaires; otherwise, all the managers interviewed face-to-face mentioned this remark. It may sounds like a slogan but it summarizes down the way the infrastructure funds are allocated to the hospitals: lack of criteria or strategies in improving the infrastructure – the necessary money is released if a manager could "impress" the local authorities. It is no wonder when the LPA representatives had the same recommendation to the managers. There is no motivation here. On the opposite, the ROP Axis 3.1 makes visible the transparency in funding and predictability as time as the procedures in the guide are followed. Yet, this program doesn't include any motivation for managers to run the infrastructure projects; the LPA is the applicant and the beneficiary; the manager has a far secondary role in. This factor is a contra-motivation.

VII.9. Availability of external assistance at regional level. Within the 8 RDAs there are consultancy departments which provide assistance to potential beneficiaries. Yet, these departments may clarify certain issues submitted to them but in the limits of the applications' guide. Their capacities are not extended to technical assistance such design, engineering or financial-economic.

VII.10. Management Problems in developing the infrastructure projects. In the survey, there were categorized a serial of problems, usually met within projects, of which the managers were asked to quote on a scale (from "very often" to "never") the incidence in the projects they had administrated. The problems occurring in the management of a project were categorized in the following: (a) improper planning. (b) insufficient funds, (c) lack of superiors' support, (d) communication shortages between funding source, hospital, constructor and other suppliers, (e) inadequate human resources, (f) lacks in defining the responsibilities, (g) unclear objectives, (h) warnings ignoring, (i) unrealistic expectations, (j) conflicts among departments and persons.

The results indicated (see Figure 13, above) the problems with the highest incidence within the projects are:

- Insufficient funds;
- Inadequate human resources;
- Communication shortages;
- Improper planning.

Whereas, for the first and the second problems, their solving doesn't depend directly on manager, the next two are part of his responsibilities and the question emerging here is "what reason stands for nominating as problems responsibilities which any manger would know is his task?" The answer may come up from the fact the LPA is the one which made the planning and ensure communication within the project. These four main problems present particularities from a type of hospital to another, from one region to another, or in accordance with manager's age and the owner of the buildings[29].

Concerning *the region,* in Muntenia South and NW the problems are perceived as being often encountered, whereas in NE and SE are situated in the opposite direction. In regard to the *type of the hospital*, the problems are more often encountered in communal and institutes and less in specialty hospitals. In regards to the managers' age, it emerges a straight correlation: the older the manager is, the problems are, generally, more often perceived. When it is analyzed vs. the RE owner, the problems are less encountered for those managers under MH; this fact may be explained through the non-involvement of MH into the infrastructure projects the managers carry out;

[29] *In Annex XI, there are presented detailed correlation between Regions, hospital, Manager's age and RE owner vs. each of the four problems presented.*

Table no. 14 – The incidence of problems in administrating an infrastructure project vs. regions, hospitals, managers' age and RE owner

Region	Quote	Hospital	Quote	Manager's age	Quote	RE owner	Quote
Muntenia S	4.3	Communal	4	>61	3.9	LC	3.2
NW	3.5	Institute	3.9	51-60	3.3	CC	3.1
Bucharest	3.3	General	3.6	41-50	3.1	MH	2.9
SW	3.1	County	3.5	31-40	2.4		
Central	3.0	Municipal	3.5				
W	3.0	Town	2.8				
SE	2.8	Specialty	2.5				
NE	1.6						

Note: the quotes correspond to the average of marks each respondent pointed for each problem. Thus, "1" stood for "Never met such a problem" and "5" stood for "Very often met such a problem".

VII.11. Capacity to apply for EU funds and to implement the operations. Within 18 months since the launch of Axis 3.1. of ROP, there were submitted 27 applications for the out-patients sections; of which 2 were rejected in the evaluation phases. The applications for the rehabilitation of the nominated county hospitals are still in a process of re-analyzing the feasibility studies. In regards to the out-patient departments of the hospitals, the applications submitted by June 2009 (see Table 15) amounted 61.6 million euro. It is obvious, that in certain regions one has been taken more action in supporting the applications for hospitals. Thus, in SE region, definitely, it may be considered a better collaboration among the stakeholders: LPAs, hospitals and RDAs. On the opposite pole are the regions Muntenia South and Bucharest-Ilfov, which haven't submitted any application, at all.

Table 15 – *Applications to ROP, Axis 3.1 June 2009*

Region	*Amount (euro)*	*Nr.*
SE	***32,467,299***	***8***
SV	***15,123,605***	***4***
NE	***4,837,374***	***4***
NV	***4,208,182***	***5***
V	***2,411,524***	***2***
C	***2,578,338***	***2***
Munt S	***0***	***0***
B –IF	***0***	***0***

Source: MRDH

In the LPAs surveyed, one was confirmed the contribution of 2% is not an obstacle in the application process. Yet, considering the need for rehabilitations of all public hospitals in Romania, the number of application is relatively low, less than 10% of the total eligible hospitals submitted applications. The following reasons may stand for this low number:

- Lack of collaboration between LPA and hospitals;
- Since the hospitals are not the applicant, then the interest is lower;
- The LPAs have many priorities and their teams cannot deal with many projects in the same time.
- Lack of information about the availability of the funds and the process involved.

Among the applicants, a larger share is part of the County Councils with 78% of the funds required for hospitals by June 2009, the rest being to the Local Councils. Regarding the type of the hospital, The County hospitals hold 72% of the total amounts and the specialized hospitals 14%; the rest being shared among municipal and town hospitals.

8% **of the eligible hospitals** submitted application for ROP Axis 3.1 in 18 months since its launching. **(Source: MRDH)**

The implementation of the operations for out-patient sections doesn't require higher qualifications than the most design companies have now, in Romania. However, for the rehabilitation of the hospitals might be needed such a specialized design in hospitals as in two of the study cases was used. The management for complex hospital rehabilitation lacks among the managers as argued, but it may miss among LPAs as well. Definitely, such complex projects need strong coordination of many providers, medical services and designers.

The capacity of the applicants to meet the funding criteria of Axis 3.1 can be largely met by the LPAs and the hospitals and this is proved by the low number of applications rejected. The implementation phase it should be viewed different from the out-patient sections to the hospitals rehabilitation. The first type of projects won't bring major problems in the design or implementation phase, whilst for the hospitals rehabilitation, unless a qualified and specialized management and designers exist, then within the implementation phase the problems would emerge.

VII.12. Coordination between the MH, managers and relevant local authorities with regard to availability of financing resources for implementing and running the foreseen investments. Within the institutional triangle, the manager holds the intermediary role between MH and LPAs. Both these institutions are supposed to support the infrastructure investments in the hospitals, however, the limits of what these investments mean is not clearly defined. The MH is supposed to fund only the specific medical equipment, yet cases of investing in the LPAs buildings were encountered. Conversely, in buildings belonging to MH there were attracted funds from LPAs. This kind of collaboration is determined by the managers acting in both directions to acquire funds for their hospitals. The managers' role in initiating and identifying the potential sources for a project is major. When the managers are not involved, then the coordination between MH and LPAs vanishes away and various problems may occur. An example in this way is the ROP. The MH was supposed to contract the FS for 15 hospitals. The lack of cooperation with the LPAs and MRDH-MAROP made the FS useless. Even though the MH is not officially entitled to promote the ROP Axis 3.1., it could have done this activity as it is in its interest to have modernized hospitals. Yet, this didn't happen. The LPAs representatives claimed the lack of cooperation of Ministry of Health in this program. For softer process of the program, it may be a need the managers to be largely involved in the management of a project trough ROP since they have already played a role in coordinating the two institutions in the interest of the hospitals.

VII.13. Communication between LPA and hospital. A question, in the survey, asked the managers to indicate to whom they go, within the LPAs, in order to communicate or solve the requests / problems regarding the infrastructure projects. Almost the entire managers responded they go directly to the top of the LPAs. Very few answers indicated the representative of the LPA within the Hospital Trustees committee or to certain directors of departments within the LPA. This fact could be explained either by the low performance of the LPA representatives or by the managers' willing to shortcut the bureaucratic chain of the institutional communication.

The institutional communication between hospitals and LPA departments created with this scope is not functional. In this context, one can notice that:

- The managers' bias for direct communication with the hierarchical tops of public administration doesn't seem to have any relation with the type of the hospital they lead;
- Conversely, the managers' preference for "top communication" can be explained through the ownership of the real estate;

The institutional communication is missing deficient, un-matured, it lacks standards and standardized procedures. This fact determines two major consequences:

a. The managers don't interact with the specialized bodies in an institutional context or in the view of some institutional roles, but with certain persons (presidents of County Councils, mayors, their deputies) which become communication partners relying on interpersonal relationships and over communicational circuits more or less informal;

b. As a surrogate solution, the information through mass-media is an alternative for institutional communication – not quite blaming, but risibly: accidental, insufficient and with no durable effects.

VII.14. Summary of positive and negative influences over the Hospital Managers to administrates complex infrastructure projects. Depending on the individual, organizational and external context previously analyzed, we can draw up a list of factors with positive and negative impact on the potential coordination of this type of project. This analysis helps both in assessing the managers' capacity to coordinate infrastructure projects and their potential role in coordinating such projects:

Table no 16 - Impacts over the managers' capacity to administrate infrastructure projects

	Positive impact	Negative impact
Individual context of the manager	The profile of a successful manager Achievements	Low value of the infrastructure project managed by hospital managers. Formal training without sections on hospital infrastructure projects
Organizational context	Availability of expertise within the hospital Hospital involved in initiating the investment proposal	Internal problems encountered: • scheduling issues, • lack of human resources, • insufficient funds • lack of information about the availability of the funds and the process involved • inadequate communication
External context	The possibility to access funds The willingness of the local public authority	External problems encountered: • Lack of assistance from MH • Lack of collaboration between LPA and hospitals • Unclear legislation • Lack of expertise to manage complex hospital infrastructure project (MH, LPA, hospitals) • Lack of possibility of the hospitals to directly apply for funds

VIII. STUDY CASES - HOSPITAL INFRASTRUCTURE PROJECTS

Emergency County Hospital (ECH) Targoviste – Dambovita County it is one of the largest one in Romania, counting up 945 beds. The hospital has been nominated to be rehabilitated through ROP Axis 3.1 and it is subordinated in terms of management to DPHD Dambovita.

The core location consists in 9 medical wards and 6 administrative buildings (head-office, washing block, kitchen, oxygen block and neutralization block). There are also, two off-core wards, which are located in other places in the city and they offer specific medical services: Tuberculosis dispensary, Infection diseases section and Nuclear medicine lab. All these mentioned buildings are in the property of the County Council which concluded an administration contract with the hospital. The hospital has under its management the medical activity of 6 school medical dispensaries, yet the real estate belongs to the Local Council. The hospital provides a large range of medical care in-patient services in many specialties as: pediatrics, internal diseases, nutritional diseases, nephrology, gastroenterology, obstetrics, ophthalmology, ORL, orthopedics, facial-maxillary surgery, infantile surgery, urology, cardiology, oncology, dermatology, physiotherapy, endocrinology, rheumatology, infection disease, HIV. Moreover, the hospital provides outpatient services as: dentistry, tuberculosis, legal medicine, nuclear medicine, emergencies, intensive therapy and imagistic medicine.

Emergency County Hospital Targoviste

The staff counts 1.412 persons and it is structured in doctors (163), other staff with university degree (30 – biologists, chemists), nurses (695), administrative (68), auxiliary (321), workers (135). The staff includes all the locations and dispensaries subordinated.

Infrastructure project: The rehabilitation of the orthopedics ward represented by a building rose in 1904. In the former stage, the building had a lower resistance to earthquakes, this being an important determining factor in the investment decision. Initially, in 2002, the present manager informed the County Council about the rain leakages in the roof which required emergency intervention. Subsequently, the representatives of the County Council evaluated the whole building and decided to promote the completely rehabilitation. The CC looked for additional funding support and it was found out such an opportunity in a WB loan project carried out through the Ministry of Transport. In the first phase of the application, the WB would have been covered a more consistent part of the total value, yet because of the delays, mainly determined by the loan approval in the Parliament in 2007, the WB share reached only ¼ of the project, as the prices for constructions increased and the last feasibility study indicated 800,000 euro, the required amount for the project completeness. The rest of ¾ of the value is funded by the County Council.

The construction works begin in January 2009 and it is estimated would last for 1 year and 6 months. For the moment, all stakeholders involved (County council, hospital, constructor) confirmed the works are in graphic.

The hospital is not part of the contract at all, yet the manager was invited by the CC to attend to meetings in the Ministry of Transport when the contract was debated. The Technical Economic documentation was contracted by the CC, the hospital hasn't any role in this process, either. The required permits were supposed to be obtained by the designing company, yet the hospital facilitated and took over the obtaining of several permits.

The construction works monitoring is performed by the County Council which appointed a respective company. The project will be turned over to the hospital at its end and it will be included in the hospital balance sheet.

Manager's role consisted mainly in providing assistance and support to the design company. The manager ensured the patients fluxes which should be treated in the respective ward.

Obstacles. In the manager's view the major obstacles envisaged (i) The design project phase has brought the major problems for project by this time. The manager figured out this is an important phase and if the original design is not well done then it is likely will occur, problems as the following:

- The building being old, it wasn't rough-cast and the designer hadn't previously checked; therefore, one was imposed the medical circuits to be changed and the patients were needed to be moved in other ward. The manager hadn't planned this patients' movement, yet he complied with the new requirement.

- The designer didn't completely check the situation and it was missed certain washing rooms. Since these spaces were quite necessary the manager imposed the modification of the initial design and because it didn't mean significant changes in the budget, the donor accepted the change.

- The sewerage system wasn't previously checked and afterwards when construction works begun one was found the system was clogged and required improvements. Another change in design.

- The designer didn't previously check the central heating system and afterwards one was figured out special permit is required for energy. This situation led to other delays.

- The manager didn't know the firemen permit is not issued only for the ward rehabilitated but for the entire building complex. Being so, the hospital had to spend unforeseen funds in order bring the entire complex under the required conditions to meet the firemen permit.

(ii) Communication problems. The manager felt himself as being considered somehow off in the construction works phase as he is not informed on the progress.

The County Council over the problems points out (c) the long process in approving the co-finance from Ministry of Transport (World Bank loan) which determined an increasing spiral of costs from one year to another; thus, whereas the initial costs was amounting around $ 200,000 in 2003, the last value in the feasibility study – 2008 - stands for euro 1,200,000.

Key points:

- One has being brought up the issue on hospital definition and tasks. The ECH Targoviste has many wards located either in a single building complex or in buildings with other locations. Moreover, under its jurisdiction are the doctors practicing in schools dispensaries.
- The manager has no administrating role in the project, only as an adviser in the design phase.
- The better the design plan made up the fewer problems occurs.
- Long financing approvals determined costs increase.

Municipal Hospital Targoviste

Municipal hospital Targoviste – *Dambovita County* is the successor of Tuberculosis Sanatoria *"Dealu Monastery"* which was founded in 1963, after 2 years since project approval. In 1982 the sanatoria becomes County Hospital nr. 2 and in 1985 was transformed in Specialty Hospital, a specific which lasted until 2002 when it became Municipal Hospital.

Between 2006 -2008, the hospital was under a re-location process of entire activity. Presently, the hospital operates in two buildings not located in the same complex, summing up 280 beds grouped in the following specialties: general medicine (30 beds), Geriatrics (25), Pneumology (50), Psychiatrics (105), Neurology (47).

The buildings are property of Local Council which concluded an administration contract with the hospital.

The staff counts 252 persons and it is structured in doctors (25), other staff with university degree (8 – psychologists, social assistants, biochemists), nurses (97), administrative (18), auxiliary (80), workers (24).

Infrastructure project: The hospital re-location was decided to take place in 2006 as the former location was located far from the city and involved huge maintenance costs. The relocation relied on the manager's initiative which determined strong support from MH, DPHD and LPA. The new location, consisting in the two buildings, used to belong to the ECH Targoviste and their rehabilitation stand for the infrastructure project presented. One building required only a hygienic cleaning and small repairs operation (lasted 2months) but the other building needed a more consistent rehabilitation whose process lasted 1 year and a half. This second building hadn't been used for several years and it was under a preservation procedure. Even after the rehabilitation, this second building still requires more investments in order to fulfill completely the design, where it was planned compartments in the mansard, too. Yet, this part was stopped for the lack of funds for the moment, being in a preservation mode.

The costs for the construction works project rose at approximately 1.4 mil euro, of which 580,000 euro were paid by the Local Council and 820,000 euro by Ministry of Health. The Feasibility Study was paid by hospital, which obtained the required permits, too.

The monitoring and the reception of the works were performed only by the Local Council, yet the hospital attended to the reception of the works where the ministry of health participated, too in January 2008.

Manager's role was decisive in the initiation of the project. She looked for support in all the decision factors: DPHD, Local Council and Ministry of Health in consisted mainly in providing assistance and support to the design company. Even though the construction contract was concluded between the constructor and the Local Council, the manager closely monitored the process and tried solve the problems occurred in. Another essential role consisted in raising the required funds to complete the works; so, she convinced[30] the Ministry of Health to co-fund the project. The work reception was part of her task as well.

Obstacles. In the manager's view, a significant problem was determined by the contract between the Local Council and the constructor. There were needed additional funds from Ministry of Health, but the Ministry cannot release legally money toward the Local council but the hospital. Yet, the hospital wasn't a part in the construction contract and consequently, wasn't able to co-finance the construction works. There was the risk of stopping the project unless the manager went to fiscal bodies and make the stakeholders to participate in finding out a solution. Finally, it was signed a protocol act to the construction contract but its legacy it is still under a question mark. A mutual agreement between stakeholders and fiscal bodies was understood.

Peculiar situation is recorded in accountancy evidences of the rehabilitated building. The total amount of the project is worth 1.4 mill euro, which was both from the LPA (580,000) and Ministry of Health (820,000), through hospital; the building belongs to the LPA. From here on, each party (LPA and hospital) registered its own amount. Therefore, in the patrimony of the hospital the building is worth 820,000 euro and in the patrimony of the LPA is worth 580,000 euro. Yet, the total amount is 1.4 mill euro.

Life Memorial Hospital

Key points:

- The management of the project is both parties agreed to be assumed by the Local Council, even though the hospital is the buildings' administrator. This agreement brought up further problems in contracting and financing.
- The manger role was essential in project initiation and funds raising.

AsiLife Memorial Hospital – Bucharest. It is the largest private hospital in Romania and it was founded in 2006. For the moment, it provides 112 beds and the following specialties: pediatrics, various surgeries, internal medicine, balneotherapy, gynecology, maternity and intensive therapy. The hospital operates as part of a larger company and the funds for investment came from its shareholders. The medical services provided may be paid by the NHIH in case the patient is insured at. Yet, the hospitalization services are paid directly by the patients.

Infrastructure project: The construction of the hospital. The decision over the investment was made by the Administrative Council of the company. The hospital has its own budget and balance sheet but it is centralized at the company level, along with other medical units. The project supposed the rehabilitation of an existed building which previously had other functionality but health services. It had to radically consolidate the foundation, to dig another level in foundation, to raise other two levels up the building and to bring up the entire building in correspondence with health services standards. The project amounted for a value of 6 million euro, where 2 million represented a loan for 10 years from IFC, World Bank division and 4 million was from own company funds.

The feasibility study was funded by IFC with support from an important health company in US, which owns more hospitals there and provided consultancy in design through the design company they work with. An appreciated input in the design project phase is from medical equipment companies which are very specialized in designing the appropriate processes required for installing their equipment; being so, the company didn't have to train his own staff and also facilitated the design company work. The medical staff requested certain minor modification in design and their input was considered. It is estimated this input meant less than 1% of design. The designer was contracted to obtain all the required construction permits.

Manager's role. The hospital' manager is appointed by the Administrative Council of the company and doesn't need any approval behalf MH. Once the manager is appointed, he becomes part of the Council. Generally, his role is over the medical sector, whereas within the investment projects, the manager is an adviser from a marketing point of view (e.g. "How many

[30] *The term "convince" it was used as there hasn't been identified any other criteria to receive funds from Ministry of Health. The reason a hospital receives investment funds against the request of other hospital it is unknown.*

beds should be in the proposed extension?), in providing certain details in the design project (e.g. the window in the surgery room should be in a certain position) or into a minimum monitoring. The logistic departments deals with the administration of any infrastructure project either it means buildings or equipment.

Obstacles face regarded the design and construction stages being listed as follows:

a) Several major estimation within the feasibility study were broadly exceeded: (i) the required personnel was underestimated, (ii) the time to prepare the surgery room for the next operation was underestimated, too; as a result, the costs have increased

b) Delays in delivering the import equipment and materials. (i) The air pumping system was delivered later than expected because one hadn't been known the usual time to deliver such an equipment lasts at least 6 months; (ii) special doors for certain sections brought up further delays for various reasons.

c) The compulsory standards imposed many auxiliary spaces which are considered useless, especially for surgery block; yet the hospital complied with these requirements against cost increasing; the pharmacy space imposes an area of 200 sqm which cost-wise was too high, therefore, it was outsourced.

d) Synchronizations between the constructor + general pipes service + surgery block constructor + medical equipment provider brought additional and major delays.

e) Important cost increasing determined by firemen permit which was initially planned. A special water basin was the essential part of.

Institute "Matei Bals" - Bucharest

Key points.

- One might be noticed the relative low cost for construction: 6 million euro, with 53,570 euro/ bed;
- The manager's role in an infrastructure projects is as an adviser;
- Major underestimations in the feasibility study, which determined consistent costs increasing;
- Synchronizations among the various constructors represent serious constraint in the project development.

National Institute for Infection Disease "Matei Bals" – Bucharest stands for the first sanitary unit in Romania which was certified with ISO 9001 /2000 for the quality of medical services with an experience since 1864 when it was funded. The hospital offers 740 beds for adults and children grouped in 4 pediatric sections, 6 adults sections, 2 ATI sections and 2 daily sections; it has also 6 performing labs and a radiology and medical imagistic service. The institute represents one of the major university bases for students and researchers in infection diseases specialty. The staff counts 781 persons, grouped in doctors (89 persons), other staff with university degree (26), nurses (353), auxiliary medical staff (201), administrative (52) and workers (60).

The hospital carried out several infrastructure projects and the consultant may state is the most developed hospital in terms of infrastructure. Major infrastructure projects were implemented, the most important ones being: (i) research center – bio-molecular, euro 49 mil, (ii) European Academy for HIV-AIDS, euro 8 mill, (iii) rehabilitation and extension of children ward , euro 3.5 mill, (iv) establish TI sections, euro 700,000. All these projects have been developed under the coordination of a manager who fills this position since 1990 (with short interruptions). The manager considers as very important to train teams in developing any project and this is what he actually, implemented. Each project has a certain management team, and the hospital manager goes, mainly, to initiate the project and ensure the funding sources.

Infrastructure project: "Research center – Bio-molecular applied to system infection disease" . The project consists in creating of a system of research labs which would permit the identification of potential pathogen agents for human or co-infections which could be lethal. The project contents a serial of fluxes and specific functions for: hematology, bacteriology, immunology, molecular genetics, cellular crops and a PIV system for patients' isolation with major epidemiologic risks. The projects comes to complete the diagnosis part already existed within the hospital. The project was determined by the present complex situation in the emergency and re-emergency of the infectious-contagious diseases (SARS, avian flu, swine flu) lately associated with bioterrorism elements which led to the development of emergency plans for intervention.

The project aims to:

a) Identify and isolate the new infection agents;
b) Ensure the analysis of several emergent and re-emergent pathogen factors in bio-security conditions ;
c) Monitor the evolution of contagious infection diseases in Romania and in the region ;
d) Develop therapeutically individual solutions as well as public health strategies, in terms of prophylaxis and treatment within a national and European system.

Before the project started the manager and a team visited a similar center in Lyon where they were advised in designing the center.

The center is to be constructed by rehabilitating an existed building of the hospital. The value of the project is estimated around 49 million euro and the funding sources are the hospital with 31 million euro and the "Impact" program developed by Ministry of Education and Research with 18 million euro. The project initiation began in January 2008 and for the moment is still under an evaluation phase under Impact program. However, it passed two other phases and the hospital was indicated to develop the feasibility study and technical design. The technical economic documentation was contracted by hospital.

The manager's role confined to initiate the project's concept, look for funding sources, assigns a team for conducting the project and to monitor the project phases. The hospital provided consistent input in the design phase since one was required to follow certain lab circuits.

Problems occurred especially in proving the ownership of the real estate. Since 1990, the hospital has undergone to several restructures which didn't reflect in the cadastre situation; consequently, it was needed to adapt the property documentation to present status. Another major problem regarded the technology proposed in the initial project. The more time the project is to be implemented the more depreciation of the technology originally proposed. Yet, the hospital obtained the approval to update the technology if required.

Key points:

- The manager's role confines to project initiation, ensure the funding sources; the project management is assigned to team formed by hospital staff;
- The hospital disposes of relevant financial sources as it performs multiple services to institutions and organizations; thus, the hospital can afford further development.
- The manager's role is definitive in the hospital's development as visible in this hospital where the huge investments have been attracted as well as modern technologies.

Institute for Emergency Heart Diseases „Niculae Stăncioiu" Cluj Napoca provides 185 beds, being one of the five heart disease centers in country and is specialized in cardiology and cardiology surgery in continuous hospitalization, daily and out-patient. The institute was founded in 1993 to permit the solving of the cases in terms of region. The institute is an emergency regional hospital of competence IB. The personnel count 470 persons, of which doctors (45 persons), nurses (222), auxiliary (92) and others (101).

<u>*Infrastructure projects: Improve the hotel conditions*</u> is part of the Institute Development Plan. The project was initiated by manager, then being debated and approved by the Hospital Directorate Committee.

The project aims to:

- Contribute to service quality increasing;
- Increase the patients' satisfaction level with at least 0.1 (on a scale from 0 to 5) in the next year of project's finalization.

Rehabilitation in Heart Institute Cluj -Napoca

The objectives are met by interior refurbishments (painting, replace the windows, antistatic carpets, rehabilitate the water systems). The estimated value is euro 425,000 with the following funding sources:

- Local and County councils – 80%;
- Ministry of Health – 10%;
- Own funds – 9%;
- Donations – 1%.

The period to be ended is 2007 – 2011.

The manager's role was to initiate, promote the project to funding sources and to coordinate the project's team. There were assigned tasks to several departments within the hospital as presented in table no. 17, below:

Table 17, Tasks assigned within the project

Department	Task
Manager	Initiate the project Promote the project to funding sources Coordinate
Administrative	Works acceptation
Technical	Develop the ToR Monitor the works
Procurements	Public acquisitions
Financial	Financial management
Legal	Develop the contracts
Labor protection	Labor security
Doctors – sections chiefs	Advisors in design

Obstacles were met on funding and project management level. Thus,

On funding level the project was delayed in 2009 because of Ministry of Health which doesn't released the promised funds. The temporarily solution was to cancel the works in the surgery ward and if this delay persists in than, starting with 2010 there will be indentified other funding sources.

On project management level there were encountered delays in 2007 in the construction phase because there were contracted different companies for each type of construction: for paintings, carpets, windows etc. Because of this pattern, the delays comes up like a domino, as the company x wasn't able to begin its works, because the company Y, which hadn't completed their works and so on. In 2008, the works were contracted to companies which were able alone to perform all the required works. This approach conducted to avoid those types of delays for 2008.

A preventing solution to avoid potential disorders consisted of weekly meetings of project team to control the progress. The most relevant result of this approach was reveal by much less delays determined through a good communication with the chief clinic sections, which facilitated the constructor's access in medical spaces. This result is viewed as a benefit for hospital since the inactivity periods don't bring money to. Another result consisted of less expenses by canceling the application of a special layer on the walls as the constructor proposed, since it wasn't a requirement in the hygienic standards; this was considered as part of the learning process of hospital team entitled with Terms of References.

Key points:

- Even though the real estate belongs to MH, the manager brought up consistent participation in funding both from Local and County Councils.
- The manager is aware on the needs to improve the project processes.

Psychiatric Hospital "Dr. Gheorghe Preda" Sibiu was established in 1863, being the first one of this kind in South-Eastern Europe and having 200 beds. In 1986, the Pediatric Psychiatry, Neurology and Children Neuro-psychomotor Recovery wards have been established.

Nowadays, the hospital consists of 14 wards covering 17,967 square meters and an external ward, with an area of 2,212 square meters, for chronic patients. It is a county level hospital, with a total of 473 beds, with three basic specialties: psychiatry, neurology and neuro-psychomotor recovery.

The hospital provides medical services in ten clinical departments, as follows:

Psychiatric Hospital "Dr. Gheorghe Preda" -Sibiu

- 5 adults psychiatry departments, 1 with 63 beds, 2 with 55 beds and 2 with 50 beds;
- 1 pediatric psychiatry department with 35 beds;
- 1 pediatric neurology department with 35 beds;
- 1 neuro-psycho-motor recovery department with 40 beds;
- 1 psychiatry department with permanent care with 40 beds;
- 1 external psychiatry department with permanent care with 50 beds;

In addition, the hospital also consists of: two centers for mental health (adults and children) for day care, day care for children neuro-psychomotor recovery with 25 beds, emergency room for adults and children, ergo-therapy and occupational therapy department, social care department, integrated ambulatory of the hospital covering psychiatry, neurology, recovery, pediatric sports medicine and balneology, pharmacy.

The following departments provide para-clinical services:

- laboratory tests;
- functional tests (EEG).
-

Regarding the staff, the hospital has 490 employees. At the end of the second quarter of 2009, the number of positions approved by the function chart and the staff structure were the following:

Table no. 18 – Personnel structure within Hospital „Dr. Preda" Sibiu

Structure of the positions	No of occupied positions
Total number of positions, out of which:	490
Total medical staff, out of which:	403
Physicians	58
Other professionals	25
Nurses	175
Auxiliary medical staff	145
Maintenance, financial, administrative, workers	87

Source: Hospital „Dr. Preda" Sibiu

Infrastructure project: "Rehabilitation, modernization and equipment acquisition for ambulatories". The project aims to increase the quality of medical care for the population through the rehabilitation, modernization and equipment acquisition for the "Dr Gheorghe Preda" Psychiatric Hospital Sibiu ambulatories and will contribute to the development of the public health system by improving the infrastructure of medical services. The "Dr Gheorghe Preda" Psychiatric Hospital Sibiu ambulatories provide medical services through its psychiatry, neurology and neuro-psychomotor recovery practices.

The present project aims to solve the following problems:

The adults' psychiatry ambulatory:

- establishing examination rooms and treatment room;

- maintenance of the building: restoring of floors, walls and ceiling, restoring/replacing exterior finishes, roof repairing, maintenance of the electric and plumbing system, replacing the heating system with an autonomous one, disconnection from the external heating system, due to heavy losses caused by the distance from the source; fitting up separate toilets.

The integrated pediatric psychiatry and neurology ambulatory:

- establishing examination rooms, treatment room, registration desk and admitting office in the available areas;
- maintenance of the building: restoring interior and exterior walls;
- restoring the electric, plumbing and heating system;
- fitting up separate toilets.

The integrated pediatric neuro-psychomotor recovery ambulatory:

- establishing examination rooms, treatment room, registration desk and admitting office in the available areas;
- restoring the electric, plumbing and heating system;
-

Also, this project aims to acquire modern equipment of diagnostic and treatment for the ambulatories, as follows:

- diapulse machine;
- high frequency pulsed machine;
- low frequency BTL machine;
- magneto-therapy machine;
- physical therapy table;
- office furniture;
- computers;
- security/surveillance video system;

The project value amounts 2,591,9 thousand lei which are to be provided by ROP (56%) and County Council Sibiu (44%). The project is supposed to be completed in 8 months and for the present is in the status of adjusting the feasibility study to meet the financial requirements as there were issued after a first appraisal of the project. The initiation of the project belonged to the hospital, but it was contracted by the County Council. The hospital didn't register the project in its ledgers.

The manager's role was confined to initiation of the project and the approval of the investment.

Obstacles. The first problems started in the appraisal phase of the project by the MA-ROP, being required adjustments in the feasibility studies in order to meet the financial criteria.

ECH Braila – Braila county operates since 1981, providing emergency medical services for adults and children from Braila city and county, as well as the surrounding counties.

Beginning in 2002, the Infectious Diseases and Dermatology Departments of "Sf. Pantelimon" hospital were taken over and since 2003, the whole "Sf. Spiridon" hospital was taken over, resulting in the present structure of the Braila County Emergency Hospital, consisting of five wards and the two medical centers, Dudesti and Viziru.

It is the only general hospital in the county, providing medical services for approximately 380.000 inhabitants with an asymmetric distribution, including areas that are hard to access all year round (Insula Mare and Balta Brailei). In addition, there is another segment of population from surrounding counties, like Buzau, Focsani, Galati and Tulcea, especially from Macin town.

A number of 1210 beds are split over a large serial of medical specialties: Internal Medicine, Endocrinology, Nephrology, Hematology, Neurology, Medical Oncology, General Surgery, Dental Surgery, Thoracic Surgery,
General Surgery, Neurosurgery, Urology, Ophthalmology, Otorhinolaryngology, Intensive Care Unit, Pediatrics, Pediatric Neurology, Pediatrics, Hemodialysis Unit, Emergency, Radiology and Diagnostic Imaging, Pharmacy, Pathology Lab, Medical Laboratory, Diabetes, Nutrition and Metabolic Diseases, Cardiology, Coronary Intensive Care,
Vascular Surgery, Orthopedics and Trauma, Dermatology, Gastroenterology, Rheumatology, Pediatric Surgery and Orthopedics, Recovery, Sports Medicine and Balneology, County Forensic Medicine Service, Infectious Diseases, Pediatric Recovery and Radiotherapy Lab.
The staff working in these departments is structured as presented in table 19, below:

Table 19 - Personnel structure within Emergency County Hospital Braila

Staff	2,100
physicians	244
other medical professionals	19
nurses	1,048
auxiliary staff	508
administrative	133
workers	143

Source: ECH Braila

Infrastructure project: "Investments in medical equipment, modernizing and refurbishing of areas made in order to provide triage, assessment and emergency treatment services for patients with acute conditions, brought by ambulances or walk-ins"

The emergency unit is structured into a *(i) Reception/triage area* at the entrance, where the patients coming with an ambulance or walk-ins are received, triaged according to their clinical urgency and assigned to a treatment area. The reception/triage area has also waiting rooms, monitored by the ED staff, where patients in no immediate danger can wait before they are showed to the treatment areas; (ii) *Information desk* is the place where patients can get general advices regarding their problems and where all the new patients coming in are registered. Here the statistical data of the ED are gathered, including those required for the regional or national databases; (iii) *Resuscitation room*, where emergency medical care is provided for the critical patients, with unstable vital signs, who require the immediate intervention of the ED staff, along with the staff from other wards of the hospital. It has specific equipment, materials and drugs required for emergency medical care, no matter the age or state of the patient; (iv) *Immediate assessment and treatment area*, where the patients requiring immediate care, with stable vital signs, but with a risk of getting worse in short time, are received, assessed, monitored and given the emergency medical care. The space is designed to receive several patients at once, the patients being separated between them by drapes, mobile screens or other flexible means, thus avoiding the partition of the space in rooms; *(v) Area for assessment and treatment of minor emergencies, not requiring monitoring,* where the patients with acute problems, but not life threatening and not requiring immediate monitoring and treatment are received, assessed, monitored and given the emergency medical care. The space is designed to receive several patients at once, the patients being separated between them by drapes, mobile screens or other flexible means, thus avoiding the partition of the space in rooms *(vi) Other areas:* Cast/splint preparation area, Specific examinations area, Observation room, Isolation rooms, Storage areas, Waiting rooms, Disinfection and parasite removal area, Decontamination area, Para-clinical and radiological diagnostic areas, Administrative areas, Conference room for ED staff meetings, as well as staff training and, if necessary, ED residents training.

The project aims to:

- contribute in the hospital's accreditation procedure;
- assess and treat the patients presenting with acute conditions, brought by ambulances or walk-ins, at the European standard;
- acquire specific emergency medical equipments;
- modernize and refurbish the respective areas.

The total value of the project was 4,542,966.76 lei, and it was founded from the following sources:

a) *Private funds:*
   S.C. Medcenter SRL Bucuresti 1,780,000 lei
   S.C. Diop Security SRL Braila 65,240 lei

b) *Local government funds:*
   Braila City Hall 75,000.00 lei
   Braila County Council 139,302.60 lei

c) *Own funds:*
   Braila County Emergency Hospital 528,566.57 lei

d) *Attracted funds:*
   The Public Health Ministry 1,954,857.59 lei

The private sources came as a consequence of previous contracts entered by hospital for outsourcing the medical lab and laundry. The project included the rehabilitation of the spaces where the two private providers function. Hence, the private

providers were obliged to rehabilitate those buildings as part in the project.

The project consisted of:

Construction, structure and equipment for the reception/triage area, information desk, resuscitation room, immediate assessment and treatment area, area for assessment and treatment of minor emergencies not requiring monitoring, cast/splint preparation area, specific examinations area, isolation rooms, storage areas, waiting rooms, disinfection and parasite removal area, decontamination area, paraclinical and radiological diagnostic areas, administrative areas, conference room for ED staff meetings, as well as staff training and, if necessary, ED residents training and acquiring of necessary medical equipment – 2,483,424.16 lei

Construction of the ambulance access ramp, partly covered, with a lane avoiding the ramp and vertical storage lane; parking lot and construction of a wrought iron fence; construction of gates for patients access and automatic barriers with sensors for cars' access in three locations; acquisition and placement of three security booths and pitching of the parking lot – 2,059,542.60 lei

The time required for implementation was 1 year.
The decision to develop the project was made by The Board of Directors of the Braila County Emergency Hospital with the approval of the Board of Trustees.

Braila County Emergency Hospital prepared:

- the Feasibility Study, The list of the staff that would work in each ED area, with specific responsibilities;
- the investment required for the equipment specific for this activity;
- the Preliminary measurements for the modernizing and refurbishing of the areas;
- the tender for investment works in constructions, interior finishing, air conditioning and medical fluids systems, following the increase in useful area from 750 m^2 to 1,490 m^2, as well as the acquisition of specific furniture.

The Ministry of Public Health prepared the open tender for partial works regarding constructions, interior finishing, air conditioning and medical fluids systems.
The Romanian-Swiss Program for Rehabilitation of the Emergency Medical Services System (REMSSy) provided the specific equipments. The investment was registered in the hospital's budget; the hospital dealt with obtaining all the required permits and authorizations.

The Manager's role. Both regarding the financial management and performance management/services quality, the role of the manager is that, along with the consulting council, to identify the sources to increase the hospital's income, through negotiation and conclusion of contracts for medical and non-medical services with the County Health Insurance Company and other companies, being also responsible for the fulfillment of responsibilities stipulated by contracts, taking measures to improve the hospital's activity.

Obstacles. The main problems regarding the financial support and implementation of this project were:

a) to Obtain the funds from the Ministry of Public Health, and
b) to Obtain the approval for the free use of the 1,553 m^2 space, belonging to the public domain of the Braila City, for the main entrance, waiting room, ambulance access ramp, parking lot and helipad.

Case studies synthesis. A synthesis of the study cases is listed below, in the table 20.

Table 20 – Study cases synthesis (1)

no	Hospital	Real estate owner	Pathology Type	Beds	Staff	Staff / beds	Doctors %
1	*Emergency County Hospital (ECH) Targoviste – Dambovita County*	County Council	General	945	1412	1.49	11.5
2	*Municipal Hospital Targoviste – Dambovita county*	Local Council	General	280	252	0.9	9
3	*Asilife Memorial Hospital – Bucharest*	Private	General	112			
4	*Institute Matei Bals – Bucharest*	Ministry of Health	Infections	740	781	1.05	11.4
5	*Heart Institute "Niculae Stancioiu" Cluj-Napoca*	Ministry of Health	Heart	185	470	2.54	9.6
6	*Psychiatric Hospital "Dr. Gheorghe Preda" – Sibiu*	County Council	Psychiatric	473	490	1.04	12
7	*Emergency County Hospital Braila – Braila county*	County Council	General	1,210	2,100	1.73	11.6

Table 20 – Study cases synthesis (2)

No	Project	Value (mil euro)	Funding source and share	Hospital Manager's role in project	Problems' category
1	*The rehabilitation of the orthopedics ward*	0.8	CC -100 %	▪ assistance in design; ▪ ensured the patients fluxes;	▪ Design ▪ Permits ▪ Communication ▪ Funding
2	*The hospital re-location*	1.4	▪ LC - 41 % ▪ MH - 59 %	▪ Initiation; ▪ Identify the funding sources; ▪ Monitor the process; ▪ Solve the problems occurred in; ▪ The work reception.	▪ Works contract; ▪ Funding; ▪ Accountancy
3	*The hospital construction*	6	▪ Company – 67 % ▪ IFC loan -33 %	Marketing; Minimum adviser in design	▪ Design; ▪ Constructions synchronizations; ▪ Compulsory
4	*Research center – Bio-molecular applied to system infection disease*	49	▪ Hospital – 63 % ▪ Ministry of Education and Research (EU funds) -17%	▪ initiates, ▪ looks for funding sources, ▪ assigns a project manager ▪ monitors the project phases.	▪ RE ownership; ▪ Long time for appraisal; ▪ Initial technology depreciation.
5	*Improve the hotel conditions*	0.43	▪ LC + CC -80% ▪ MH – 10% ▪ Hospital – 9% ▪ Donations -1%	Initiates; Finds resources; Assigns and coordinate clear tasks.	▪ Funding; ▪ Project management
6	*Rehabilitation of ambulatories*	0.62	ROP – 56% CC – 44 %	Initiates; Approval.	Financial Feasibility
7	*Emergency Unit*	1.16	MH – 47% Private – 40% Hospital – 11.6% LPA – 4.7%	Administrator of entire project	Funding; RE ownership;

Source: Consultant's research

The Lessons learned from the study cases spin around the following conclusions which may stand as a supportive mean for other managers.

a) Appraisals and approvals last more than expected when more funding sources in place. Meanwhile, the initially costs may substantially vary up or new technology is required. Furthermore, when is an international donor involved, it assumes an initial amount which may represent 40% of the investment, but because of the new costs, the international source doesn't comply with new costs, that is why its contribution may be 10%, finally. *The hospital needs to consider to cover by own/other means the difference in cost increasing.*

b) Many hospitals are not part in an infrastructure project at all, moreover, when is about LPA funds. If this is the case, the hospital cannot monitor the works in its yard, cannot push a delayed constructor and cannot impose certain design view or corrections to the constructor, unless goes to LPA. Another negative effect may be the impossibility to bring other funds in that project if one is been required (e.g. Ministry of Health). *The hospital needs to insist to be part in the contract.*

c) *A hospital team needs to collaborate closely with the designer* either the funding source or the hospital involvement. In this way there are avoid non-compliances with the hygienic standards. Few examples: (i) The sewerage system wasn't previously checked and afterwards when construction works begun one was found the system was clogged and required improvements, (ii) The designer didn't previously check the central heating system and afterwards one was figured out special permit is required for energy. This situation led to other delays.

d) *Firemen permit* was a serious obstacle for two cases analyzed. It seems that fire conditions were treated superficial. If a hospital consists of more wards and only one is refurbished, the firemen permit needs to be obtained for the entire complex. In other case, the fire conditions imposed special constructions which raised the costs much more than estimated.

e) *The manager's role is essential in project initiation and funds raising*. He is supposed to know the best his "yard" and nobody would pay better attention than him / her. In the present conditions, when the funds transparency and predictability is pretty low, both in LPA and MH, it seems on the manager's lobby capacities depend much of the funding decisions.

f) *Real time to deliver imported equipment.* When the project supposes imported equipment it should be considered more delays than expected and to get informed about the time certain equipment could be really delivered. For example, an air pumping system cannot be delivered earlier than 6 months.

g) The designer could get significant input from certain medical equipment dealers which provides professional consultancy in designing the required flows for special medical equipment. *Include assistance in design from medical equipment providers.*

f) When more constructing companies are involved in the process, there come up problems in their synchronization as they depend one of another. *The lack of synchronization may bring up consistent delays.* The solution is either to hire a single company which manages all the works and subcontracts certain specialized parts or the hospital coaches a good project management team.

g) When greater projects are developed it is a must to *have a vision of the shape the project* would finally look like. Technical knowledge needs to be updated to purchase the latest technology.

h) The documents that prove *the ownership must be in clarified*. In any project with international funding this issue is requested in the respective application, including the funds through the ROP Axis 3.1.

i) *Weekly meetings of the project team*, chief section doctors and the other stakeholders are recommended to avoid delays and bring response to eventual problems in time.

j) *The outsourcing of certain services* to private companies may bring contributions from the respective companies in the overall budget of the project, if the buildings where they operate are included in the project.

IX. SITE MANAGEMENT OF HOSPITAL INFRASTRUCTURE

A hospital consists of the infrastructure and the staff; the last is clearly under the manager subordination, but for the first there are doubts as presented along the report. In the figure no 14, there are exampled 4 cases of hospitals.

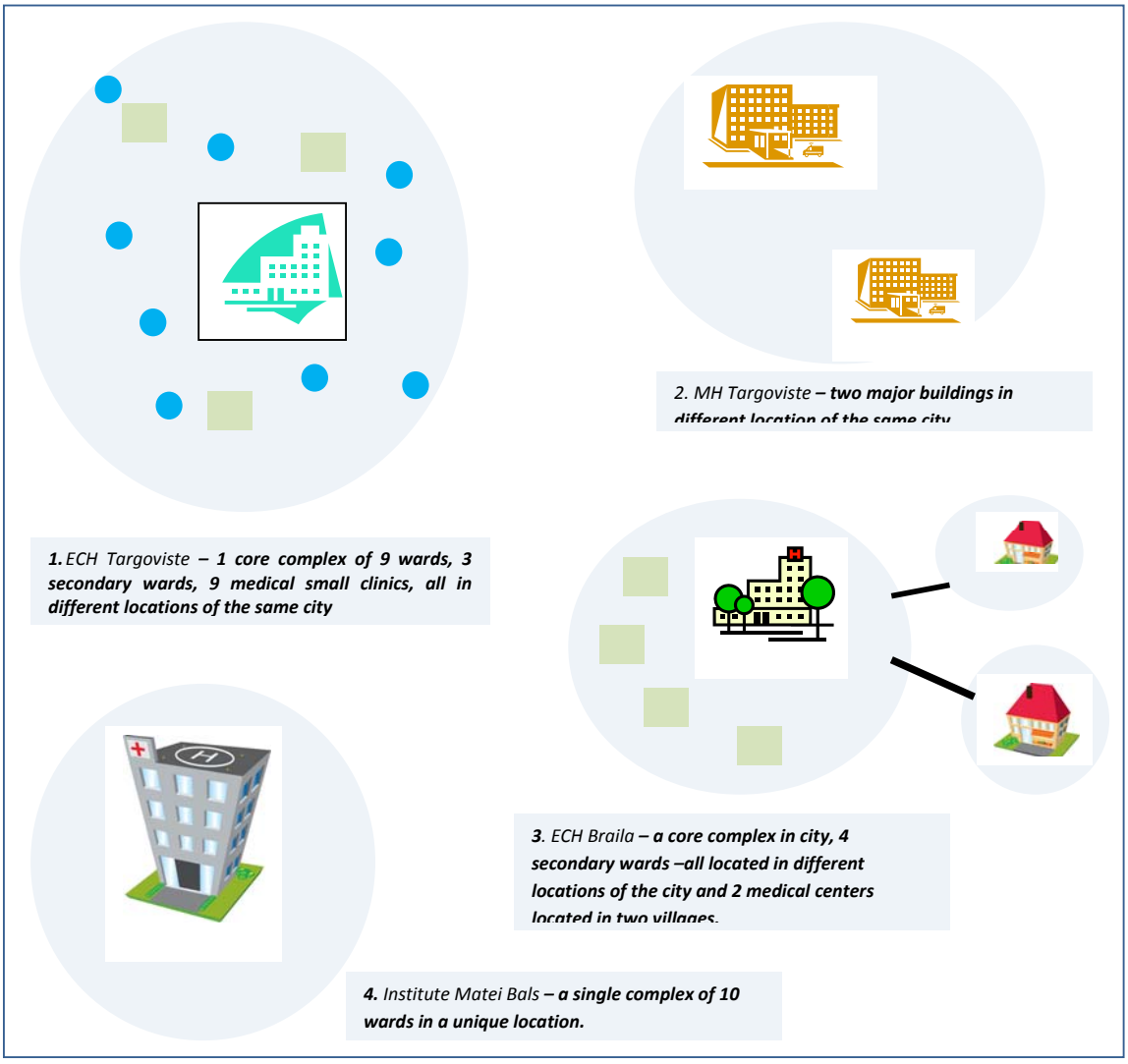

Figure no.14 – Types of hospitals in terms of location

The management of a hospital covers the medical services as well as the building operations, maintenance and investments. In the figure 14 , above, one might be noticed that in accordance with the infrastructure and its location, the management of the infrastructure requests different approaches.

In the 1st example, ECH Targoviste has under its management:

- a core complex of 9 wards, where the buildings are administrated by hospital, but are the property of County Council;

- 3 secondary wards located in other parts of the city, the buildings being administrated by hospital, but are the property of County Council;
- 9 small clinics, where the buildings belong to Local Council.

In all these locations the management of the medical services is under ECH Targoviste. The manager's view as well as the County Council and Local Council respectively is that the LPAs are entitled and responsible with the infrastructure projects.

In the 2nd example, MH Targoviste operates in two buildings located in different part of the city; no deputy manager appointed for the second building. The medical services are under hospital management, the buildings are under an administration contract with the Local Council, which is the owner. The manager agrees with the idea to let the Local council to deal with the infrastructure projects on her demand.

In the 3rd example, ECH Braila operates in a complex and 4 secondary wards in city, where the buildings belongs to the County Council, but the medical services in two medical centers with beds in two farther villages are under hospital management, too. The buildings in the villages are in the ownership of the respective Local Councils. The manager doesn't agree the County Council administrates the infrastructure projects and it happened even not to be announced when the County Council once began an infrastructure project. As for the locations in villages, he would be very glad to turn over the management of the medical services to somebody else.

The 4th example, Institute Matei Bals – Bucharest functions in a single complex with 10 wards and the buildings belong Ministry of Health. The manager has a broader view and consider the infrastructure project' management should be only under the manager's task. The hospital is one with the highest investments done in infrastructure.

Definitely, the infrastructure's management is better performed when the hospital is at a single location and has a single owner. However, would there be problems if the hospital operates in various sites of the city, under various owners or in different localities? There might occur the followings:

- No accreditation. The hospital will be accredited as a whole, but the more locations, the less chances to bring all locations at an appropriate stage of operation. Moreover, the more owners, the less chances to convince the owners to fund projects in the same time. The chances are pretty low in the 1st example to modernize so many locations as well as in the 3rd example, where the village Local Councils don't avail money and it won't have in the following years as the manager was informed.
- A more demanding infrastructure management. The more locations the hospital has, the more complex is the infrastructure management for a single person, the hospital's manager. Moreover, when the locations are in different locations.
- Difficulties in accessing ROP funds. In the current situation, the more locations and more owners, the more chances to have property problems.

Should the hospitals with more locations be split out and form new units, accordingly? If yes, there are advantages in better management, better access to funds, and more chances to be accredited. Another solution would be to let the separate locations under the same umbrella of the hospitals but establish them as independent branches - cost centers – with own management.

Infrastructure projects and hospital types. In allocating the funds it needs to be considered the importance of the respective medical unit from the standpoint of public health.

In Romania, where only in the last years it started to be discussed and to begin the investments in the hospital sector, the situation needs to be regarded depending on the type of hospital. Although it is normal for the units deemed to be important to receive funds on priority, it needs to be discussed also the situation of the hospitals less important at system level, but very important locally for the health of the served population.

In this regard, the field studies have shown if only the LPAs would be the only left with the responsibility in funding the infrastructure projects, then the low level hospitals (town, communal) would be in decline sooner or later. In such situations decisions with regard to the functioning of the respective unit need to be made: to keep it running or to close it? Or who needs to invest to bring it back to functional standards as long as the local community cannot financially afford the rehabilitation?

X. MALFUNCTIONS

Several disorders were noticed by consultant within the management process in the infrastructure project, and are worth to be listed for future corrective actions and lessons to other managers. One may be considered the following disorder represent the normality, yet the consultant considers the disorders' effects hamper the course of an appropriate infrastructure project' management.

The administration contract appoints the manager as the administrator of the real estate belonging to LPAs. Legally, as an administrator, the manager is the one entitled with the buildings administration, regardless this task is clearly specified in the contract or not. Once an investment project is approved by the owner, the project should be carried out by manager, either the funding sources are. This is the case both for LPAs own investments or ROP Axis 3.1. There is no common administration contract among hospitals.

The management contract doesn't have any straight provision on managing the infrastructure projects and this fact determined a part of the managers to consider this is not their task. On the other hand, a performance indicator in the managers' evaluation deals with the capital expenses. With the same management contract provisions, the managers of hospitals under MH, straightly interprets the infrastructure project management is in their tasks.

Many hospitals don't meet sanitary and environment preservation criteria and this status is largely known. There are required infrastructure investments but it is little action done in this respect; some managers rely on the impossibility of the control agencies to close an important hospital because it doesn't meet the respective criteria.

Difficulties in dismissing the inadequate human resources were pointed as a major problem of the manager in performing their functions. The manager is the only person within a hospital which can be replaced after an evaluation process. The rest of the staff can be hardly removed being defended by a pro-employee Labor Code.

Zero applications in Bucharest – Ilfov and Muntenia South regions indicate certain problems. Considering the large number of the existed hospitals in these regions, it is curious that no application was submitted. There might be an institutional problem as well. 18 hospitals in Bucharest are included in the pilot phase of management transfer to LPAs.

Building value registered different in the patrimony of LPA and hospital after the implementation of a project funded both from LPA and MH. The hospital registered the building with the value received from MH and the LPA registered the building with the value funded by itself. However, the value of the building is the sum of the two sources.

Citing DPHDs representatives, *there are managers too busy with participating in various seminars and managing private medical businesses;* with this style, the management act of the hospital suffers.

In many projects*, the hospital doesn't have any representative within the management team with either role.*

Unrealistic demand for medical services in ROP applications. In the scope of obtaining as many as possible points within the technical–economic evaluation, the applicants propose new services (e.g. planning familial or psychology guidance) with no elementary study over the potential demand for such services. However, a new type of services supposes not only an adequate space, but specific human resources and specific maintenance costs which are not included. Moreover, the demand for the existed health services is presented as doubled after the project implementation on the simple basis of the decreasing of diagnosis time.

Specific cases of malfunction

County Council begin the works without any previous notice to the ECH Braila The case of the rehabilitation of the Infectious Diseases Unit from the County Hospital Braila is a particular situation, which can very well happen in other hospital infrastructure projects, therefore the consultant deemed appropriate to present it. Starting from the needs of the hospital and from the fact that the Hospital's infrastructure allows it (the hospital has a structure with pavilions) the County Council Braila decided to invest in the rehabilitation of the infectious diseases unit, unit that was operating in an separate pavilion. Both the hospital manager and the financial director claim that they were not consulted in regards to the rehabilitation of this unit, therefore being faced with the situation in which the builders team were supposed to start the rehabilitation and in the respective unit medical activities were performed.

The Public Health Directorate Braila could not give the approval for the performing in the same time of the construction yard and provision of medical services in the same location, and the manager of the hospital needed to find solutions to

temporarily move the infectious diseases unit until the rehabilitation of the unit. At this moment the infectious diseases unit of the county hospital is nearing its term of completion and the hospital manager will need to reinsert it in the hospital's functional circle, if this rehabilitated building comply to the norms in order to receive the approval of functioning from the Public Health Directorate.

The non-involvement of the hospital in the rehabilitation of this unit implied difficulties, disturbance of the activity of the hospital, and of the functionality of the services provided by the hospital as well as financial losses in the conditions in which the hospital had a provision of services contract with the Health Insurance House. All the representatives of the involved authorities (hospital manager, representative of the County Public Health Directorate and the representative of the County Council) have agreed than many of the functional problems, delays and unnecessary costs could have been avoided if everybody would have been involved since the beginning in the respective project.

This issue of not involving the hospital manager in the decision making process over investment projects needs to be taken in consideration in all the future hospital infrastructure projects, at least from the standpoint of the need to organize the hospital's activity during the unfolding of the project as well as from the standpoint of the subsequent reinsertion of the building in the functional circuit of the hospital.

Frequent regulations changes affect the project's objectives: *The rehabilitation of the ECH Braila outpatient section*. At the moment when the decision was made to unfold the respective project, the legislation was allowing the functioning of the outpatient unit at the higher level of a building. The project is near finalizing now, but the legislation does not allow anymore the functioning of the outpatient unit at a higher level, therefore the Public Health Directorate cannot issue the functioning permit for the respective outpatient unit. In the absence of the functioning permit, the outpatient unit cannot contract the reimbursement of the services from the Health Insurance House.

In this new situation, even if the building in question has been rehabilitated, it cannot enter in the medical functional circuit, as such the manager needs to find solutions to preserve the functionality of the building.

XI. ACTUAL STATUS OF THE HOSPITALS' ACCREDITATION

Comisia Nationala de Acreditare A Spitalelor - Co.N.A.S. (National Commission of Hospital Accreditation) became a distinct legal entity and a public institution that functions under the coordination of the prime-minister since the 9th of October 2008 according to the Government Decision no. 1148 issued on 18th of September 2008, published in the Official Monitor no. 689 of 9th of October 2008. The National Commission of Hospital Accreditation (Co.N.A.S) is being both financed of its own funding and of state-budgeted subventions. The National Commision of Hospital Accreditation (Co.N.A.S) has as a main purpose the accreditation of the hospitals in order to constantly improve the quality of the medical hospital services in Romania.

According to the current legislation (Law 95/2006 and Government Decision 1148/2008) Co.N.A.S is a fellow-like directing body formed of five members that each represent: The Presidential Administration, The Government, The Romanian Academy, Romanian College of Physicians and the Romanian Order of the Primary Care Providers and Midwives, elected on a 4-year period, by a decision of the prime-minister, at the proposal of the institution/professional organisation manager. The executive management of Co.N.A.S. is ensured by the general manager, hired on a competition-based selection for a 5 years time. The General manager takes part in the Co.N.A.S. meetings as a guest-attendant, having no right to vote.

Within the framework structure of the National Commission of Hospital Accreditation function:

a) The Standards and Accreditation Procedures Unit (Unitatea de Standarde si Proceduri De Acreditare) – responsible for drawing up and permanently bringing up to date of the standards and accreditation procedures of the hospitals, in accordance with the developments in the field.
b) The Analysis and Accreditation Unit – responsible with the centralization of the evaluation records and other data resulting from hospital evaluations;
c) The Evaluation Body – formed up of experienced hospital evaluation specialists that work under a defined labour agreement,
d) The Administrative Staff of Co.N.A.S

The National Commission of Hospital Accreditation has the following prerogatives:

- ratifies the hospital accreditation categories;

- ratifies and decides the accreditation of a hospital;
- approves of the content and the model of the accreditation certificate – decides on the accreditation procedures, standards and methodology of the hospitals;
- approves the forming up of the Evaluation Committee for the purpose of accrediting a hospital;
- proposes quality improvement strategies of the medical hospital services;
- presents an annual activity report to the Government and to the Ministry of Public Health;

In accordance to the current legislation, the hospitals are required to regain accreditation every 5th year. During the accreditation process, the National Commission of Hospital Accreditation can commit both Romanian and foreign experts.

In the 28th of November 2008, on the web-site of the Ministry of Health there was an announcement regarding a competition (to fill in the general manager of the Co.N.A.S. position) scheduled for the 15th and 16th of December 2008. On the 16th of July 2009, the National Commission of Hospital Accreditation organised the first press conference stating that "The Accreditation process is a very complex process that requires establishing hospital accreditation categories, defining and implementing procedures, standards and accreditation methodologies, all these having as a final objective the improvement of the Romanian medical hospital services. "
According to the Commission director, dr. Dan Robert Serban, the accreditation standards will be established depending on what it is considered to be the optimum objective to be reached in order to benefit from performance; the accreditation shall be made when solicited by the managers of the hospital units, based on a partnership.

„Accreditation process is scheduled to begin on the 22nd of January 2010", said dr. Serban, stating precisely that one of the most important and necessary aspects of the accreditation process, in order to start it off, is the human resources aspect, more precisely gathering accredited evaluators; their training is absolutely necessary in order to finalise in a good manner the evaluation process.

The Committee Director also stated „Accreditation could be for the entire hospital unit or only for a certain department". (source: http://www.medicalmanager.ro/articol.php?id=4766&cmd=print).

According to the statements of the general Committee director during the press-conference, the accreditation process of a hospital will include 6 stages:

- the request of the hospital to receive accreditation,
- acceptance and planning of the visiting period
- auto-evaluation of the hospital based on a specific form,
- visit of the accredited evaluators of CoNAS,
- followed by the evaluation report and recommendations and by
- an evaluation of the efficiency of the measures of quality improvement.
-

Based on these stages a final accreditation report will be compiled. (source: www.cotidianul.ro, 16 July 2009).

On the web-site of the institution (http://www.conas.gov.ro) are posted the proposals of the Commission that refer to the accreditation standards. These Commission proposals were conveyed to be approved by the fellow-like directing body and then by the Ministry of Health. The Proposals are grouped under 11 chapters or references:

- Reference 1. Strategic management of the organisation
- Reference 2. Operational management of the information
- Reference 3. Human Resources Management
- Reference 4. Management of the care setting
- Reference 5. Management of quality services
- Reference 6. The rights of the patient and communication
- Reference 7. Patient Records Management
- Reference 8. Healthcare Management
- Reference 9. Prevention and risk Management
- Reference 10. Management of Nosocomial Infections
- Reference 11. Transfusion and Transplantation Safety

In Reference 4, the reference that refers to the management of the care setting, several criteria that refer to ensuring safety and maintenance of the equipment, of the installations and of the building as a whole. Of the criteria proposed by the Commission for the evaluation process we note: " the institution regularly evaluates the technical condition of the equipment,

installations and of the building as a whole"; " the institution ensures the functioning of the equipment, of the installations and of the buildings", "the institution ensures the maintenance of the equipment, of the installations and of the buildings".

XII. MANAGERS' POTENTIAL ROLE WITHIN THE INFRASTRUCTURE PROJECTS

This section focuses on the role of the managers in the hospitals where real estate is in the ownership of the LPAs. The analysis refers to the majority of the managers, being understood there are exceptions from.

In a hospital infrastructure project, it is compulsory for the public hospital manager to play a certain role, even if the project is financed by the Public Administration, Ministry of Health or other investors. Due to his position in the hospital's management, the manager is responsible for its smooth running. When talking about the hospital infrastructure project we must consider that these are run within the hospital, for the hospital and the result will be better medical services and patients' satisfaction.

Mintzberg, in the '70s, identified ten roles the manager has, grouped in three categories:

- Interpersonal roles;
- Informational roles;
- Decisional roles.

Interpersonal roles

These roles refer to the relations the hospital manager should have and develop, as an administrator, a hospital coordinator, as well as it's representative, as the final beneficiary of the hospital infrastructure projects; these relations should be developed by the manager of a public hospital both as the coordinator of hospital infrastructure projects, as well as a member of the implementation team. His relations with representatives of the Public Administration, Ministry of Health, other ministries (potential investors) should be both formal and informal, because the manager should actively interact in all the stages of the infrastructure project implementation. This interaction will insure him the access to relevant information, allowing him to make decisions required for the smooth running of the hospital in the context of an infrastructure project. Thus, the manager can reconcile the running of the hospital with the hospital infrastructure project, can coordinate the activity of the medical and non-medical staff and patients with the implementation of the hospital infrastructure project in all stages. Thus, the manager is the link between all these human and material elements, keeping constantly in focus the hospital's and patients' interests.

From the interviews with managers, we established that the hospital manager, alone or alongside the hospital's board of trustees, is the person who initiates the proposal of investments in the hospital infrastructure. In many cases, the managers stated that the project proposal for hospital infrastructure is made along with the Ministry of Health or the County Council, which shows that the managers are directly involved in any project regarding the improvement of the infrastructure of the hospital they run.

Also, regarding the communication with the Public Administration, most frequently, in hospital infrastructure projects, the manager contacts directly the general managers of the county or local council or the department managers of the county council. This is due to the fact that hospital managers are aware of the importance of interpersonal relations in the success of a hospital infrastructure project, but also because only in the Bucharest City Hall there is a special department responsible for the administration of hospitals – Hospital Administration – so the hospital managers must contact the managers of the local administration. On the other hand, one of the most frequent recommendations the hospital managers had was to seek support for hospital infrastructure projects directly from the owner of the hospital building.

Informational roles
In implementing hospital infrastructure projects, the manager of the public hospital must:

- Collect;
- Spread;
- Pass on information.

The hospital manager plays an important role in monitoring the activities in the hospital infrastructure project, being an essential meeting point in receiving and passing on information regarding the activities within those projects. No matter who the investor is (Public Administration, Ministry of Health etc), the public hospital manager must have information regarding the stage of the construction, deadlines, investment stage (payments), potential problems encountered along the way. Either supervising those aspects personally or delegating them to another expert, all the information regarding the hospital infrastructure project implementation must reach the manager, because according to his management contract, he is responsible in organizing and managing the hospital's activity. The assessment performed by the consultant revealed the following main aspects:

- In performing their informational roles, the public hospitals' managers recognize the importance of a good relation between the Public Administration and the Ministry of Health, in order to obtain and pass on the information. Thus, the case studies showed that the managers consider useful in their activity to communicate with hospital staff at all levels, only the communication with resident physicians and non-medical staff being considered of a lesser importance.
- In many cases, passing on the information to the Ministry of Health is not followed by an immediate feedback, so the managers must send several requests for approvals, leading to the delay in implementation of certain activities.
- Hospital managers considered that in previous hospital infrastructure projects problems arose from faulty communication, one third of them considering these problems as occurring frequently or very frequently and a quarter of them as occurring from time to time. We consider that the involvement of the manager would lead to fewer communication problems and a possible solution would be to create the legal framework suitable for communication.

Decisional roles

According to Mintzberg, there are four kinds of decisional roles

a) Entrepreneurial role. In this position, managers take decisions regarding changes in the organization. In this context, we must determine if there is a change in the organization called 'hospital' when implementing a hospital infrastructure project. If yes, and this is always the case in large projects with big impact, such as a hospital infrastructure project, then the hospital managers must play this role according to their position.

b) The role of unraveling disturbances. This role demands them to take decisions, starting from those events they can't control. This is also the case of hospital infrastructure projects, in which the hospital manager depends on decisions taken at other levels that in turn influence the planning of hospital infrastructure project activities, with a direct and big impact on the activity of the hospital he runs.

c) Funds allocation factor. The manager takes decisions regarding the financial contribution he can have in a hospital infrastructure project, such as human, time and equipment resources. In case of hospital infrastructure projects, it is possible that this is the decisive factor in the successful implementation of this kind of projects. From the case studies performed, it is easy to conclude that the hospital manager is directly involved in the management of the investment budget. Even if Accounting Department is the main department involved in drawing up the budget, the manager verifies and accurately manages it.

d) Negotiator role. Within this role, the manager negotiates with the local public authorities, the Ministry of Health, the Public Health Directorates, with the project teams (contractors and subcontractors), with the medical, support and auxiliary staff.

These roles change in time and may vary a lot, depending on the conditions and the environment. There is no universal recipe to follow, and there is no ideal way to balance these roles by the public hospital managers in implementing hospital infrastructure projects; what is applicable in some cases might not be in others.

The present manager's role depends on the funding source, with the amendment that it doesn't mean that in all projects a donor (e.g. LPA, EU, WB) finances it is followed the same principle. In certain projects, the administrator is the hospital, in other is the LPA. The general rule is that is no rule.

However, there might be centralized a situation like in the following:

Funding source: LPAs (generally, all) and ROP
In these cases, the LPA is appointed to be the project's administrator with more or less agreement behalf the hospitals' managers. The manager's role being confined to:

- needs assessment,
- funds identification and
- an adviser in design.

Funding sources: MH and few cases of LPAs
The manager might be the administrator of the project when the funds are from MH, in few cases from LPA or from other donors.

Funding sources: other donors (WB, PHARE, EU programs, ministries)
It depends from case to case; in projects developed with WB support, the projects' administrators where both LPAs and hospitals.

The manager's role shouldn't depend on the funding source. Except for the MH, the donors tend to treat directly with the LPAs as the owners; yet, the real estate administrator' role of hospital enforced through the administrative contract signed between hospital and LPA is broadly unknown or neglected. Either, the funding source, the hospital should administrate the buildings. The hospital is not a renter of LPA.

It is a need to clarify the present manager's role. Then, the potential role is defined by clarifying this present role. This need becomes more imperative in the view of decentralization when the health management of hospitals would be transferred to LPAs. Even in this perspective, the manager's role needs to be particularly clarified.

The MH has to decide what roles are to be fulfilled by managers. There have been identified two options for the potential role the manager could fill in the infrastructure projects. In selecting one option, the MH should consider the managers' opinion and the institutional framework that would facilitate or hamper the option chosen.

1st option potential role: *LPA is entitled to administrate the projects and managers will be responsible for accomplishing certain tasks*, like: needs assessment, funds identification, advising for design and approve the technical solution proposed. All the required contracts are concluded by the LPA and the investment is registered in the patrimony of the LPA which turn it over the hospital through an addendum to the administration contract.

Actions to undertake:

1) The management contract between MH and mangers is modified accordingly, by specifying the tasks the managers have to fulfill into an infrastructure project;
2) To issue an Order by Ministry of Administration and Interior, with a common format for the administration contract concluded between LPAs and hospitals, including provisions over the tasks into an infrastructure projects; regardless the funding source, the procedures in administrating such a project should be the same.

Strengths:

a) The majority of the managers would agree on as these process is already largely extended;
b) In general, the managers don't have the capacities to administrate complex projects; improvements in their capacities would last at least 1 year.
c) Managers have more time to administrate the medical act. The private hospital example may be taken as a supportive example in this case. In the private hospital, the manager is involved within an infrastructure project only in needs assessment and advising the design process. The rest of tasks are taken over by the logistic department, which deals with all the project's phases.

Weaknesses:

a) Disruptions and incoherence in the process of the hospital management are likely to occur if the infrastructure when more decision factors act alike: the hospital's manager and LPA.
b) In the following period, considering the variety and multitude of infrastructure projects with EU or Governmental funds in many economic sectors, the attention dedicated to health projects might by diminished.
c) The option would leave gaps in the cases where the personal links between the manager and LPAs high ranked representatives are not friendly enough.
d) Following the principle of a common procedure for either the funding source, there might occur problems when funds from MH are attracted in a project. The MH cannot release funds toward the LPAs.

2nd option potential role: *The manager takes over the entire process* of any infrastructure project in his hospital. It depends on him to delegate or contract certain tasks or services. The investment needs the LPA's approval. All the required contracts for any service or work are concluded by hospital, which registers the investment in its extra-balance patrimony.

Actions to undertake:

1) The re-investment of managers with these tasks. Basically, the administration contract of the buildings -existed in every hospital- is promoted among the managers and LPAs.
2) Specific provisions regarding the role within infrastructure projects are introduced in the management contract signed with MH.
3) The managers need to be trained in project's management and to improve certain capacities.

Strengths:

a) A project would present more coherence as time as a single institution coordinates it.
b) A higher involvement of the manager in the improvement of the hospital's infrastructure; He cannot claim or assume is LPA task. An example in this way is represented by the better conditions the hospitals where the RE belongs to MH and, practically, the here is no other entity to administrate any project in the hospital, but the manager.
c) At local level, and especially within a community, the manager of a hospital enjoys a much better image that a manager of an LPA might hope to achieve, and this is valid for most of the Romanian counties, with probably very few exceptions. This proves to be an important asset in the Romanian environment of infrastructure investments, where we have multiple allegations about corruption being easily spread at local level, and practically blocking numerous projects of this kind;
d) The manager of a hospital brings his/her experience in similar infrastructure projects developed in the hospital and this is a real asset because these projects have their own peculiar characteristics which makes them very different from other infrastructure projects;
e) Being a manager of a hospital means also the fine grained understanding of the circumstances in which an Hospital Infrastructure Hospital will be developed, and this is due to the fact that, in most cases, the old hospital being refurbished or the new hospital being built, will necessary have an impact on the current on going medical activities, and in this regard the manager is the best positioned to deal with this major change;

Weaknesses:

a) The time allocated to these projects takes the time which is, presently, allocated to other activities.
b) The hospitals don't have qualified teams to develop the projects;
c) Considering the non-transparency of funds allocation will still have a life for the following years, the political non-compliances or unfriendly links between manager and the LPA will block the allocations of funds.

Suggestion. The consultant considers the potential role of the manager should follow the format of the first option but framed in a partnership. A hospital investment decision should be made keeping in mind, as a starting-point, the needs of the population. This is the reason why decision-making is not (as it also should not be) an easy thing to do without previous analysis of each situation or taking into consideration the investment context. The important aspects are the purpose of the investment as well as the sustainability of the project. Both, the LPA and the hospital managers must know and must be involved in decision. Most of the times, the hospital manager is closest to the population needs. He is in the condition to best know these needs. Therefore, removing the hospital manager from the decision-making process regarding necessary investments is a decision that should not be considered. Also, being the one that best knows to what extent the offered

services fulfill the up mentioned needs, the hospital manager should be provided with a more well-developed legal mechanism to follow when planning to make an investment.

In this partnership, at least the following amendments should be inserted:

a) No project should be implemented unless the manager approves it.
b) The hospital has a member within the appraisal teams of tenders, with the power to say "No".
c) The hospital should be part in the construction contract, with the right to monitor the works, to bring up modifications during the works if it is a must, and to be informed about the progress.

XIII. ADMINISTRATION CONTRACT

In 2002, the Hospitals Real Estate was transferred from State ownership to LPAs through several Government Decisions. Afterwards, an administration contract emerged between each hospital and the respective LPA, which practically, is the legal document which links the medical services of the hospital to the buildings where these services are provided. The contract doesn't have a common format, but institutes the right of hospital to administrate the buildings and the land, respectively.

In the contracts the consultant obtained[31], there is no direct provision on who is entitled to administrate the infrastructure projects, but several provisions regulate certain aspects of investments:

> *"Ensure the financial resources for rehabilitation, repairs, and modernizations in the budget limits".* So, the LPA should provide the financial sources for infrastructure projects, but transferring them to the hospital, which is not the equivalent for "Administrate the infrastructure projects".
>
> *"Request the LPA approval when the hospital decides to run infrastructure projects"* it is a provision in the sense of an administration contract that is: the administrator is the one who is responsible for any project over the objectives turned over in his administration but needs the owner's approval when infrastructure projects are needed. Moreover, through this provision, the hospital is permitted to run by itself the infrastructure projects, but with LPA's approval, which is normal.

In addition to the responsibility of administrator – which is quite different of the one of a renter, enjoyed by some managers and LPAs – the provisions above shouldn't let any doubt over who is legally entitled to run any infrastructure project, and that is the hospital. The LPA should just transfer funds in the hospital accounts.

In legal terms, the objective of an administration contract is different from a rental contract. Thus, the hospital shouldn't be considered a renter, the hospital is the administrator of the buildings, meaning, no project is done without its agreement and all the projects should be managed by the administrator. A provision in one of this contractor says: "The owner would do not undertake anything to hamper the hospital's activity." Cases as the one in ECH Braila, where the CC came over the hospital with a project by no previous warning, shouldn't have produced as it didn't have any legal endorsement.

The consultant noticed the provisions of this document are not known among stakeholders and definitely not enforced; it is an appendix: "Maybe it is useful in something, but we don't know to what." would be a thought any stakeholder in infrastructure projects has, either it is a donor, owner, regulator or a hospital.

[31] *In Annex X – an administration contract is attached.*

XIV. AN EU OVERVIEW: PORTUGAL AND GREECE.

In the last decades, EU States experienced the implementation of new methods to reduce the costs and increase the quality with the hospital services. Privatization and PPP are two of the lately models to aim the objectives above.

PPP is viewed as one of the promising methods, yet, it hasn't registered enough experience to permit a relevant analyze. It is still in an incipient stage, registering more problems rather than successes. Concluding examples may be considered UK and Portugal in this sector. In this perspective, Portugal case is further analyzed.

XIV.1. Portugal – *Public Private Partnership (PPP) experience*

Reforms and strategies

Portugal hospital sector is known for its attempts to reform through PPP system, reorganizations of public hospitals to determine a higher degree of management efficiency and regulation by the Health Regulatory Agency. Yet, the concrete results are still in the future.

The Ministry of Health is responsible for developing health policy as well as managing the National Health System (NHS), which provides universal coverage. Five regional health administrations are in charge of implementing the national health policy objectives, developing guidelines and protocols and supervising health care delivery. Decentralization efforts have aimed at shifting financial and management responsibility to the regional level. In practice, however, the autonomy of regional health administrations over budget setting and spending has been limited to primary care.

The NHS is predominantly funded through general taxation. Employer (including the state) and employee contributions represent the main funding sources of the health subsystems. In addition, direct payments by the patient and voluntary health insurance premiums account for a large proportion of funding.

Hospital care has been subject to major reforms in the last 10 years:

- Statutes changed to entail a more efficient management;
- closing of several hospital maternity departments (although obstetric consultations and antenatal care do continue to take place at those hospitals), based, according to official documents, on clinical safety criteria;
- putting two (or more) nearby hospitals under the same management team;
- announcement of new hospitals to be built under PPPs.

Hospital Statutes

The reform regarding the changes in the hospitals' statutes was implemented on 1 January 2003 for roughly half of the hospitals, and has been extended to other hospitals over the years. In the first phase, the hospitals were considered to be a public company, with capital provided solely by the Government, and were named "*Hospitais SA*" or "*Hospitais EPE*". The hospitals that did not go through this transformation process continue to be managed by civil service rules and are known as "*Hospitais SPA*". Over time, more hospitals have been transformed from "*SPA*" to "*EPE*" status. The main objective of the reform was to provide autonomy and management accountability to hospital boards. The next step has been the introduction of explicit contracting of services to be provided by hospitals, which is to be carried out in 2007 for both "*Hospitais EPE*" and "*Hospitais SPA*".

Public Private Partnerships (PPP)

The PPP program involves construction, replacement/refurbishment and private management of over ten hospitals and several specialized centers in two waves. The objective is to include rapid (re)development of infrastructure, more efficient provision of public health services, improved patient care quality, and using the public-private partnership model if successful as a benchmark and driver for change for the public sector.
The use of PPPs, is still under way, even though it was launched in 2003. The first attempt to set up a PPPs project to build a new hospital in the outskirts of Lisbon failed for procedural reasons to move to the final stage of negotiations and subsequent contract signing. The whole process for that hospital had to be restarted, after recognition that existing procedures and proposals were not standardized enough to allow a clear decision to be made. Meanwhile, several other PPPs projects have been launched and are under review. The rehabilitation hospital at S. Brás de Alportel, near Faro

(Algarve region) is the first PPPs hospital, and it started receiving patients in April 2007. The use of the PPPs approach was also followed for CAS, the NHS Call Centre.

The Portuguese PPPs have, as their main distinctive feature, the award of two contracts: *one for construction and maintenance of infrastructures and the other for clinical activities management.*

The first two PPPs projects started operations in April 2007: a rehabilitation hospital in S. Brás de Alportel (located in the southern region of Portugal, the Algarve) and CAS, the NHS Call Centre, and it has been estimated that there have been substantial savings from this operation. Looking at a public sector comparator, with a reference value computed to simulate what would be the expected cost under public construction and operation, these two new facilities are contracted at a cost that is 6.2% and 17.5%, respectively, below what would be expected. The next PPPs projects to be completed, according to announcements by the Ministry of Health, are the hospitals of Cascais, Braga, Vila Franca de Xira, Loures, Todos os Santos (Lisbon), Faro, Seixal and the Lisbon Oncological Institute, some of them with even higher savings estimates.

Major problems appeared in the procedures to select the partners for the hospital PPPs, although several have been launched anyway. The first hospital tender was abandoned and resulted in process changes to improve effectiveness and efficiency of PPP projects, such as more rigorous justification rationale and appraisal
of proposed projects and their budgetary implications, improved bidding process and management of contracts

The PPPs have made their way into the press, with two lines of discussion: on the one hand, criticism of the Government on the length of the procedure and on the other hand, mutual accusations by applicants on incomplete proposals.

Hospitals. Classification and data

Trends in hospital numbers have been similar to those in other European countries. There has been a significant decrease in the number of hospitals over the decades, from 634 in 1970 to 171 in 2004 (a reduction of 73%). Over the last few years there have been progressive improvements to some older physical infrastructures. In 2001 the Health System had a total of 38 452 inpatient beds, distributed in the following way: about 74% belong to the public network, which includes the NHS and the Islands of Madeira and the Azores, 3% to the official non-public areas (namely military, paramilitary and prison facilities) and 23% to other institutions (among which 78% of beds belong to the social sector and 22% to the profit-making private sector).

Follow the hospitals' reform in 2003, the public hospitals are classified in three categories.

Hospitals SA: public corporations with the state as exclusive shareholder (under the corporate law). They were created through the transformation of 34 public hospitals into 31 public corporations, chosen as medium-sized ones, with a debt below 35 per cent of total expenditure and having previously demonstrated some management ability. These public corporations received their own capital and took over all assets and liabilities of the former public units. They have financial and administrative autonomy. Hospital boards are independent and accountable for operational and financial results. The new regulation sets an upper limit on corporate hospitals indebtedness at 30 per cent of the social capital (the board approval is required when new borrowing raises the debt above 10 per cent of the social capital). The hospitals SA started to operate in January 2003 with new management teams appointed by the Ministry of Health (details on the selection criteria for those teams is not public). While the hospitals SA remain under the supervision of the Regional Health Agencies (RHAs), their development and performance have been monitored closely by a special task force (*Unidade de Missão Hospitais SA*) directly attached to the Minister of Health.

In particular, benchmarking of hospitals is made on a monthly basis, with a focus on productivity and efficacy of resource management. At this stage, the benchmarking includes very few quality indicators, and quality monitoring depends essentially on each hospital. There are plans to add more quality indicators in the future and launch patient satisfaction surveys. Some hospitals have also contracted auditors to run clinical audits and this is in the process of being generalized. A "quick wins" program was launched in five pilot hospitals with the goal of testing key improvement programs. Results for the first year of operation of the hospitals SA published in March 2004 are encouraging: *activity increased more than twice as fast as costs, implying lower unit costs.* Yet, the situation is however very heterogeneous from one hospital to the other, with unit cost variations ranging from +18.2 to -36 per cent.

Hospitals were recapitalized before being transformed in corporations so as to cover existing obligations and ensure that the hospitals had enough working capital to effectively manage their balance sheets. This recapitalization represented about 1 per cent of GDP.

Public hospitals (SPA): public institutions with administrative and financial autonomy, but under public management, (the public sector administrative law). Concerns the 51 remaining public hospitals. The management modernization of the

remaining 51 public hospitals (hospital SPA, *i.e. hospital do Sector Público Administrativo*) is essential to avoid creating a two-speed system. It started in August 2003 with the adoption of new regulations that try to replicate as much as possible the hospital SA experience within the public sector. New management teams were appointed at end-2003 (details on the selection criteria are not public). Contract-programs are established with each hospital, setting objectives and quantitative targets, priorities and modalities for the provision of services, quality standards, monitoring and evaluation systems. The new legislation includes the possibility of providing additional financing to hospitals as a reward for improved outcomes, quality and productivity. Non-financial incentives for productivity (training for instance) are envisaged for staff.
PPP hospitals: public institutions with administrative, financial and asset management autonomy under contracted private management (under the public sector administrative law). Ten PPP hospitals (including eight substitutions to existing old facilities and two additional units) are planned to be built by 2010. The first one should be inaugurated in 2008 in Loures; bidding has been launched and the construction should start by early 2006. The authorities plan to issue three tenders a year, in the 2005-08 period, to complete the tender phase by early 2008 and have all units operating by end 2010. The PPP contract provides ten-year contracts for the operations and thirty-year contracts for the infrastructure are granted after competitive bidding, with technical competence and economic terms offered being the most relevant criteria. In terms of initial investment in facilities and equipments, the program represents about 1 billion euro. The only previous experience of a PPP in the health care sector in Portugal started in 1995 with Amadora Sintra pilot experience. The main lesson from that experience, which encountered mixed success, is the need to put in place a very strong legislation as regards supervision of these PPPs, which was missing until recently.

Hospital financing

Total health care expenditure in Portugal has risen steadily from as little as 3% in 1970 to 10% of GDP in 2004, above the EU average of 9%. Portugal now spends more than both Italy and Spain in terms of proportion of GDP(OECD, 2006).

The NHS budget is set annually by the Ministry of Finance, based on historical spending and the plans put forward by the Ministry of Health, within an overall framework of political priority setting across the different sectors. Capital and current expenditure are separated, with the Ministry of Health retaining control for all capital expenditure. The estimate of total expenditure for the current year is adjusted by the expected increase in the level of consumption, salary levels and the rate of inflation. The global budget for health is ultimately determined by the Ministry of Finance, based on macroeconomic considerations.

The Ministry of Health allocates a budget to each RHA for the provision of health care to a geographically defined population. In practice, however, RHA autonomy over the way in which the budget is spent has been limited to primary care, since hospital budgets are still defined and allocated at the central level. The RHA budget for primary health care was set in 2003 on the basis of a combination of historical expense and capitation. This approach was introduced in 1998 and the budget computation has been progressively skewed towards a relative increase of the capitation component. Each RHA budget reached a balance of 40% for historical values and 60% for capitation.

Investment funding

Capital investments in the NHS are funded by the Ministry of Health, and some by special programs. The governmental budget for 2007 foresees an expenditure of approximately €40 million on the national health program, *Saúde XXI*. It should also be mentioned the investments under the PIDDAC (an investments program for government departments) amounted to €138 million in 2004 and €92 million in 2005, below the budgeted amounts, and including a significant component of EU co-financing (approximately 45%).

One of the Government's objectives is to improve the NHS providing capacity while guaranteeing more value for money, by associating private entities in the sphere of public responsibility to build, maintain and operate health facilities, under the so-called PPPs. From a financial point of view, the transfer of financial risk from the State to the private operators through PPPs alleviates the former from the initial investment burden, which would be otherwise excessive considering the financial constraints of the public sector.

Capital investments in the NHS are funded my MH and some by special programs. The Gvt budget for 2007, foresees an expenditure of approximately euro 40 mill on the national program Saude XXI. Capital investments in health are determined at central level, by the MH. Capital investments in health are determined at the central level, by the Ministry of Health, which had, until the recent civil service restructuring, a Directorate- General for infrastructure and investment.

Hospital management

All hospitals belonging to the NHS are in the public sector, under Ministry of Health jurisdiction. Private sector hospitals, both non-profit-making and profit-making, have their own management arrangements. Since 2003, almost half the NHS hospitals have been given statutes similar to those of a public-interest company (*Hospitais EPE*). This is clearly an attempt to introduce a more corporate structure into hospital management, with the expected effects on efficiency and cost-

containment. The hospitals not yet transformed are now under pressure to provide better services to their patients, as their performance can be compared to that of the hospitals that have already been converted.

All hospitals are financed through contracts (*contratos programa*), but "*Hospitais EPE*" have many decision-making powers with relation to capital, staff, and negotiation of input prices, which are not present in the traditional NHS-run hospitals. Among the new management rules, "*Hospitais EPE*" may hire staff under individual labor contracts (instead of collective agreements) and may set the performance-related payment schedules of professionals. The use of incentive schemes is seen as a way to counteract the existing rule of "equal pay/least possible effort". Several hospitals are also getting together to block purchase pharmaceutical products and other clinical consumables, taking advantage of the bargaining power resulting from larger acquisition volumes.
Minister of Health appoints hospital administration boards; in regard to the role of the local public authorities, their role is rather marginal in the hospital sector.

Decentralization

New hospitals legislation further strengthened the central power, requiring that all hospitals directors be directly nominated by the minister rather than central authorities. Similar steps were taken in the hospitals' action plans approvals, which was transferred to MH as well, rather than regional authorities.

In practice, however, responsibility for planning and resource allocation in the Portuguese health care system has remained highly centralized even after the current five RHAs were established in 1993. RHAs are appointed by the Minister of Health. In theory, the creation of the RHAs conferred financial responsibility: each RHA was to be given a budget from which to provide health care services for a defined population. In practice, however, the RHA autonomy over budget setting and spending has been limited to primary care, since hospital budgets continued to be defined and allocated by the central authority. It is also the case that the Minister of Health appoints hospital administration boards. At the hospital level, the delegation of responsibility down the line of management, allowing lower-level managers greater power to deploy resources more efficiently, was the rationale for the creation of responsibility centers.

Successful decentralization needs a specific social and cultural environment, in addition to laws and regulations. The historically centralized nature of the Portuguese health care system will be changed only when the reform initiatives last long enough to guarantee ideological certainty in the implementation of the changes that are needed.

Portuguese lessons

- Portuguese experience to implement PPP shows this model takes time and needs a well developed strategy and implementation plan, with sufficient lead time to make adjustments critical for ensuring success.
- The split of the public hospitals in two categories – in terms of management: one category works on corporate status, whereas the other category works on the same basis. In this frame, working in parallel, there could be maintain both them, making adjustments and compare each one's effectiveness.
- The decentralization has to be carefully appraised and it should be motivated by health or management objectives and not just because a constitutional requirement, politically driven. Portugal declares the decentralization, but it is not actually implemented. It is also relevant the Norway's case , where the health decentralization was abandoned after 32 years.
- The reduction in the hospital beds' number creates the problem of waiting list for patients.
- The capital investment is funded only by MH; Having a single institution with such a responsibility, it is recommended against more institutions assigned with this investments, each one waiting for the other to cover the respective expense.
- The shortage in monitoring and imposing efficiency in the health sector drives toward strong difficulties in further adjustments and cost control.

PPP in Romania has been lately practiced in Romania hospital sector by turning over in several hospitals to private medical companies certain medical services as: laboratories, dialysis outpatient or superior hospitalization services.

Under the PPP, the infrastructure projects points out certain advantages, as a consequence of the private rules:

- the investments costs are considerably lower; the same project is with at least 50% more expensive if State develops it rather than a private company.
- The budgets are rarely exceeded;
- The deadlines are better respected.
- The required adjustments in the process are faster implemented;

Table 21 - Models of public–private partnership in hospital provision (Portugal)

Model	Description
Franchising	Public authority contracts a private company to manage existing hospital.
DBFO (design, build, finance, operate)	Private consortium designs facilities based on public authority's specified requirements, builds the facility, finances the capital cost and operates their facilities.
BOO (build, own, operate)	Public authority purchases services for fixed period (say 30 years) after which ownership remains with private provider.
BOOT (build, own, operate, transfer)	Public authority purchases services for fixed period after which ownership reverts to public authority.
BOLB (buy, own, lease back)	Private contractor builds hospital; facility is leased back and managed by public authority.
Alzira model	Private contractor builds and operates hospital, with contract to provide care for a defined population.

Source: Martin McKee et al. Bulletin of WHO, Nov 2006

The PPP model takes a pretty long time to permit adjustments and a good implementation; in Portugal, it has been taking more than 7 years. Romania needs rapid action in the hospital infrastructure sector. In parallel with other model for improving the hospital infrastructure, the Romanian PPP may further continue with turning over to private medical companies certain type of medical services as one has already done;

The privatization is an alternative to closing certain hospitals as it seems it would happen.

XIV.2. Greece - The health infrastructure investments process

Statistical data about Greece

Greece has almost 11000000 inhabitants (data from 2001 national census), more than 15% of the population is over 65 years old, and 50% live in urban area. Conventional life expectancy is around 75 for men and 80 for women. UNDP Human Development Index (a composite index measuring average achievement in three basic dimensions of human development - a long and healthy life, knowledge and a decent standard of living) is 0.947 (the HDI for Romania is 0.825). The total health expenditure is almost 9% of the gross domestic product.

Public sector health expenditure as % of total health expenditure was 42.8 for Greece in 2005 compared with 70.3 in Romania and 68.48 for European Region of World Health Organization. This indicator is the sum of outlays for health maintenance, restoration or enhancement paid for in cash or in kind by government entities, such as the Ministry of Health, other ministries, para-statal organizations, social security agencies, (without double-counting the government transfers to social security and to extra-budgetary funds). Includes transfer payments to households to offset medical care costs and extra-budgetary funds to finance health.

Table 22. Public sector health expenditure as % of total health expenditure (Greece)

Year	*Greece*	*Romania*	*European Region*
2005	42.8	70.3	68.48

Data source: Health for All database, WHO

Total capital investment expenditures on medical facilities as % of total health expenditure - representing the sum of capital outlays earmarked for construction and renovation of medical facilities (hospitals, clinics, health centers etc.) and purchasing medical equipment and vehicles- as WHO data shows was 4.2% in 2001.

Table 23. Total capital investment expenditures on medical facilities as % of total health expenditure (Greece|

1995	1996	1997	1998	1999	2000	2001
3.6	3.6	4	4.3	4.1	4.7	4.2

Data source: Health for All database, WHO.

The Greek National Health System Overview

The health care system in Greece is financed by a mix of taxed-based and insurance-based financing, sharing elements from both the Bismarck model (health care is funded by social insurance) and the Beveridge model (health care is funded by the state budget). The Ministry of Health exercises central control by regulating, among others, social insurance funds, the payment of hospitals, the number of the personnel employed in the hospitals and rural centers. The national health insurance system is public, though optionally, a private form of insurance can be chosen. In 1934 was create IKA (Social Security Institution) a vast organization comprising hundreds of administrative centers and health units; it was introduced in common with many other countries of southern Europe. All IKA members have access to a sufficient standard of health care as well as a pension upon their retirement.

In 1961 was founded a new organization named OGA (Agricultural Insurance Organization) which covers all the country's rural population.

During the eighties was created a new system ESY (National Health System) comprising all public hospitals and rural health centres. Following restructure, ESY was divided into autonomous and independent regional branches called DYPE (Regional Health Systems) and professional hospital management was introduced for the better administration of the system.

The Hospital governance in Greece

Administration and management

The public hospitals are operated as independent units in each of the Regional Health Services (DYPE). They are managed by professional hospital managers who are appointed for five years.

Surveillance authority
Some health insurances own and operate their own hospitals. The public hospitals depend on the Regional Health Services since 2001.

Each DYPE is a public entity, with a director appointed by the Minister of Health and Social Solidarity, which has the responsibility of the coordination of regional primary, secondary and tertiary health activities within the area. Out of a total of about 300 different social insurance organizations, about 40 provide coverage against the risk of illness to nearly all the Greek population.

The Greek Hospitals

There are three categories of hospitals in Greece:

- 177 general hospitals,
- 23 combined hospitals,
- 139 specialized hospitals.

In addition to that, 13 public hospitals are military hospitals and 3 so-called teaching hospitals.

Currently, the number of hospital beds is 482/100,000 inhabitants whereas the number of hospital doctors is 223/100,000 inhabitants (the number of total doctors is 534/100,000 inhabitants) and nursing care personnel is 326/100,000 inhabitants.

Table 24. Hospital beds per 100000 inhabitants, 2006 (Greece)

Year	Greece	Romania	European Region
2006	481.69	654.29	670.13

Source: European health for all database (HFA-DB),World Health Organization Regional Office for Europe, updated: August 2009

Table 25. Physicians and nurses per 100000 inhabitants, 2006 (Greece)

	Greece	Romania	European Region
physicians	534.59	192.06	338.97
nurses	326.81	397.44	722.27

Source: European health for all database (HFA-DB),World Health Organization Regional Office for Europe, updated: August 2009

Hospital beds are at 500/100,000 inhabitants and hospital services are delivered mainly through public hospitals. Private sector hospitals are mainly in the capital of Greece, Athens. They are characterized by a modern infrastructure and high technology equipment, but they have higher costs compared to public hospitals.

The most important aspects regarding the hospital financing are contained in the following table:

Financers	The hospitals are reimbursed by the social security. The State funds hospitals up to 70%. Officially, the public funding of hospital operation expenses is limited to the payment of salaries. In practice, the state covers all costs incurred in hospitals, except what is reimbursed by the health insurances.
Modes of payment	Reimbursements by the social security are calculated on the basis of a price per day. The State subsidies cover the salaries on the basis of a previously determined budget. The State also funds hospital deficits retrospectively.
Investments	The Regional Health Services (DYPE) are in charge of hospital planning and equipment in public hospitals.

There are 14 DYPE in Greece: A DYPE Attica, Third DYPE Attica, A DYPE Central Macedonia, B DYPE Central Macedonia, DYPE Central Greece, DYPE Thessaly, DYPE Ionian Islands, INIO South Aegean (Cyclades) INIO South Aegean (Cyclades), VDYPE South Aegean (Dodecanese), DYPE Crete, DYPE Epirus, DYPE Peloponnese, DYPE Western Macedonia, DYPE Eastern Macedonia - Thrace .

Structural Funds and hospital investment projects in Greece

On the 5th of November 2007, the European Commission approved a regional operational program for the regions of Western Greece, Peloponnesus and Ionian Islands for the period 2007-2013, all falling under the "Convergence" objective.

The total public budget of the program is around € 1.14 billion and the Community assistance through the European Regional Development Fund (ERDF) amounts to € 914 million. The interventions relate mainly to transport infrastructure, environment, rural and urban development, culture, entrepreneurship and digital convergence, social infrastructure and services, health and social care. Three general development objectives have been defined, namely a) to develop and modernize transport infrastructure, b) promote digital convergence with the use of Information and Communication technologies (ICT) and support for entrepreneurship and c) support a sustainable development and quality of life. The strategic objectives of the program are to increase the attractiveness of the region.

The bulk of the ERDF contribution (62%) is injected in interventions relating to quality of life and sustainable development. Some 950 hospital beds shall be constructed and modernized. The priority 8 (Sustainable development & quality of life in Peloponnesus), as regards health and social infrastructure, has the aim to improve and build infrastructure facilities relating to primary & secondary education, the health centers and social care stations. One of the components of the priority 9: Sustainable development & quality of life in Ionian Islands, is to complement the medical equipment of hospitals and health centers. In Greece the management authority for POR is the Ministry of Economy and Finance.

Hospital infrastructure projects in Greece

The hospital infrastructure projects in Greece are developed in private-public partnership (PPP) Greece had experience in PPPs through transport concession agreements; the Greek government announced its intention to create a market friendly environment for PPP implementation and issued in 2005 a new legislation which constitutes the ground for the development of PPPs in Greece (Law 3389/2005). The legislation is the result of extensive consultation; it allocates risks to public and private sector and provides incentives and assurances to the private sector. Some of the main aspects contained by legislation are as following: established an Inter-Ministerial PPP Committee, established a PPP unit within the Ministry of Economy and Finance, defines a clear approval and tendering process for PPP projects, incorporates the principles of EU legislation, specifies terms and issues that every Partnerships' agreement should address.

The Ministry of Economy and Finance confirms in March 2009 the plans for the Greek health infrastructure which will be developed through PP partnership:

- New Pediatric Hospital of Thessaloniki - € 389 M
- New Oncology Hospital of Thessaloniki - € 396 M
- New General Hospital of Preveza - € 131 M
- Rehabilitation & Recovery centre of Northern Greece - € 124 M

The hospital will be built on a plot of the Municipality of Mikra in «Cor», area 128 acres. The first phase for the design competition started In December 2008.

For this project, named "Construction and maintenance of the Pediatric Hospital of Thessaloniki" the contracting authority is DEPANOM SA and the supervisor is the Ministry of Health and Social Solidarity. The project involves the design, construction, financing, maintenance, facility management (cleaning, linen, waste management and catering), insurance and security of the new hospital, along with the provision and maintenance of all necessary clinical and support equipment of the new Hospital.

The new hospital will have up to 400 beds, aiming at the provision of modern clinical services to children up to 14 years.

It is underlined that the medical and nursery staff of the Pediatric Hospital of Thessaloniki will be part of the National Health System, along with the management of the Hospital.

This PPP project falls under the strategic plan of the Ministry of Health and Social Solidarity for offering modern clinical services. The project is expected to significantly contribute to the treating in Salonica of all urgent cases, which up to now are transferred to the Pediatric Hospitals of Athens.

During the operational period, which will be 27 years, better facility management and maintenance of infrastructure will be achieved, via setting high quality and availability standards, upon which the reimbursement of the private sector will depend.

The unit for implementing hospital infrastructure projects: DEPANOM SA

In Greece was established in 1983 a public company having the objective to provide infrastructure for Health and Welfare sectors named "The Public Construction of Nursing Units". Nowadays the unit name is DEPANOM SA and the scope of work is in particular:

- to design, to construct and to equip the new units of the health and welfare area
- to repair, rebuild, upgrade and supply installation of equipment of existing facilities and health care.
- to Study organization and operation of health and welfare.

Based on the command of the Ministry of Health and Social Solidarity DEPANOM is undertaking any work in health and welfare domain.

Greek lessons

- the supervision of big hospital infrastructure projects is done by the Ministry of Health and Social Solidarity which has a special agency dealing with the design, construction, financing, maintenance, facility management (cleaning, linen, waste management and catering), insurance and security of the new hospital, along with the provision and maintenance of all necessary clinical and support equipment. This model could have been considered in Romania where, for time being, more institutions have responsibilities in running the hospital investment. Yet, with the already launched decentralization, this model is doubly would be implemented any longer.
- The PPP model for investment in hospital infrastructure should be considered and for this purpose it would be useful to gather detailed, first-hand information on the experience and good practices of the Republic of Greece in planning, financing and implementing of PPP projects in health sector.
- Health care reform is still under debate and some voices say that changes in the health care sector in Greece since the path-breaking introduction of the National Health System (NHS) in 1983 have been sluggish. However, the way in which the hospital investment has been organized should be for Romania a starting point of thinking in how this issue should be approached.

XV. ACTION PLAN

Improving the hospitals' infrastructure projects impose making certain major decisions and actions taken. The consultant proposes the ones listed in the followings sections.

Hospital infrastructure strategy. The infrastructure projects are closely linked to the beds number, where the objective is to reduce the value from 5.85 beds/1.000 inhabitants (2007) to 4.3 (2014). This reduction may follow few options: (i) closing certain hospitals – the minister of Health already made statements in this way, (ii) reducing the number of wards; (iii) keep the same number of hospitals and wards, but reduce the number of beds within a room. The number of beds is on the level of the EU average and less than Germany, France or the former communist Eastern Europe countries. On the other hand, there are hospitals whose level of hospitalization is low (communal, town) and others, where the hospitalization level is over 100%. By no means, a low number of beds/1000 dwellers is not translated in better services for the patients, being known the problem of scheduling non-urgent surgery within the States with low number of beds as: Great Britain, Ireland, Portugal and Norway.

Action 1	Each hospital should be evaluated beds occupation wise and afterwards being decided over the beds number. The hospitals with the chance for further under-funding may be transformed in ambulatory centers or privatized.	
	Decision maker	A collaboration between Ministry of Health and each LPA which owns a hospital over the country.
	Time	1st Semester 2010
Action 2	Develop an infrastructure strategy for hospitals by setting the priorities and selecting the hospitals which are to be modernized.	
	Decision maker	Ministry of Health, Ministry of Administration and Interior and the LPAs owning a hospital.
	Time	2nd Semester 2010
Action 3	*Allow transparency of infrastructure funds.* A transparent granting of the funds from the Ministry of Health and Local Public Authorities should be pursued and this could be achieved by their publication on the institution's website as well as by drafting clear methodologies for using the financial resources.	
	Decision maker	Ministry of Health, Local Public Authorities
	Time	2nd Semester 2010

Decentralization process is in the phase of testing the management transfer toward LPAs, after the property was done in 2002. The procedures should be carefully regulated and the responsibility for covering the capital costs must be clearly stated. This be noted the Norway experience where after 32 years of decentralization, the hospitals came back from LPAs to MH; also in Portugal – the case analyzed – the LPAs has no role in hospital sector. Because the county has been given the responsibility over the maintaining the functionality of the hospital buildings, it is important that the county also has the autonomy to plan, finance and implement the appropriate solution and also it need to be involved in designing the elements of health policy.

Action 4	Design new regulation and establishing the roles that every party must play: maintain the role of MH in national health policy and decide over the responsibilities given to local authority	
	Decision maker	MH, LPA,MF
	Time	1st semester of 2010
Action 5	There is no simple approach to planning health care. If the local authority has a role in designing policies, in establishing the plan for local health care, then there is a need to train adequate human resources for planning health care at county level.	

	Decision maker	MH, LPA,MF
	Time	1st semester 2010
Action 6	The responsibility in investments, by turning clearly over to the LPAs. MH would be entitled only for specific national programs. In this way, the law 95/2006 requires certain changes.	
	Decision maker	A collaboration between Ministry of Health and each LPA which owns a hospital over the country.
	Time	Year 2010
Action 7	The manager's subordination imposes new regulations. Therefore, the management contract should be adapted to underline the matter of subordination to MH and the ones to the LPA.	
	Decision maker	Ministry of Health, Ministry of Administration and Interior and the LPAs owning a hospital.
	Time	3rd Quarter 2010

Capacity to apply for EU funds. The Axis 3.1. of ROP provides funds for modernization of 15 county hospitals and for the ambulatories of the rest hospitals. The applications submitted in 20 months are a few, even though initially, one was considered the amount allocated for this axis is considerably low in respect to the sector needs. There are regions where the applications number exceeded the amount allocated and others like Muntenia South and Bucuresti -Ilfov, where no application was registered.

Action 8	In the evaluation process there should be a correlation between the strategy for investments pointed out in case I and the ambulatories where the investments are done. There should be avoided to invest such funds in hospitals where the MH may decide to close it or to transform it.	
	Decision maker	MAROP, MH
	Time	3rd Quarter 2010
Action 9	In developing the FS for the County Hospitals there emerged problems which have led to consistent delays. Meanwhile, the ambulatories of other hospitals submitted applications for funds. In order to avoid consuming the funds by ambulatories, there should be separated.	
	Decision maker	MAROP, MH
	Time	3rd Quarter 2010
Action 10	*Development of an information campaign of the Ministry of Health* towards all the subordinated hospitals whose buildings belong to the County/Local Councils. This campaign may take the form of some simple and brief recommendations regarding the conditions to access the structural funds available through ROP Axis 3.1.	
	Decision maker	MH
	Time	2nd Semester 2010
Action 11	*The manager should be involved in ROP* and be assigned with a key role. His missing leads definitely to project incoherence, being proved in the other projects the manager's involvement brought the projects forward when problems occurred.	
	Decision maker	MH and MAROP
	Time	3rd Quarter 2010

Action 12	*The application should have the hospital included as a key player in the project management. There shouldn't be unconsidered the hospital' role as an administrator of real estate*	
	Decision maker	MH and MAROP
	Time	3rd Quarter 2010

Hospital Management Training in SNSPMS. The training sessions are under a continuous development process and for the moment several facts may require improvements. An emphasis on theory and theoretical approaches can be noticed in the hospital management course. Some of the more practical modules are organized around the instruments but the vast majority is theoretical.

Action 13	Introduce interaction, share experience, real examples and promote the solution finding.	
	Decision maker	SNSPMS
	Time	1st – 3rd Quarter 2010
Action 14	Introduce the following courses: project management, management of infrastructure projects, financial management and broad technical knowledge.	
	Decision maker	SNSPMS
	Time	1st -3rd Quarter 2010

The Management contract between MH and the hospital managers sets the responsibilities and the rights of the manager. In regards to the infrastructure projects, the contract doesn't provide specificity, therefore it has been permitted interpretations up to understanding this kind of projects are not under manager's responsibilities.

Action 15	In keeping with what is politically decided, the contract should provide more specifications over the role a hospital manager would have within the infrastructure projects.	
	Decision maker	MH, LPA
	Time	1st Quarter 2011
Action 16	Considering the important role the LPAs fill on hospital infrastructure, the contract should be a tripartite one, having the LPA to sign it.	
	Decision maker	MH, LPA
	Time	1st Quarter 2011

The Managers' capacity to administrate infrastructure projects is relatively low as resulted from the analysis based on a study which included a quantitative and a qualitative survey. In constructing the analysis, there were appraised factors as: infrastructure achievements, motivation in running infrastructure projects, managers' energy, knowledge of the business, infrastructure projects' experience, project-management know how, financial management knowledge, Broad technical knowledge,

Action 17	The managers' capacities to run complex infrastructure projects could be improved by increasing knowledge (project management, financial management, technical) and motivation.	
	Decision maker	MH, LPA, SNSPMS
	Time	Year 2011 on

Hospital Site Management refers to the characteristics of hospitals in terms of the type and the location of their wards. The respective locations may have different owners, but the hospital manages the health services. To a site perspective, there are hospitals operating in a single site, but also hospitals operating in more sites of the same cities or even in villages around. This situation may bring up problems in the accreditation process, as the hospital needs to comply with the conditions in all its location.

Action 18 For the secondary locations, either establish them as autonomous centers / cost-centres of the same hospital or as new hospitals.

Decision maker	MH, LPA, MAI
Time	1st Quarter 2011

Real estate administration contract. In 2002, the Hospitals Real Estate was transferred from State ownership to LPAs through several Government Decisions. Afterwards, an administration contract emerged between each hospital and the respective LPA, which practically, is the legal document which links the medical services of the hospital to the buildings where these services are provided. The contract provisions are not acknowledged or ignored. Even though out of this contract, the hospital is the real estate administrator, it is rather perceived as a renter among stakeholders.

Action 19 The role as an administrator of the hospital, and the functions rooting from here should be promoted among the stakeholders, especially among LPAs and hospitals. The manager should be re-invested with the real estate administrator's role. Certain provisions regarding this role must be framed out the contract.

Decision maker	MH, LPA, MAI
Time	1st Quarter 2011

Manager's role within the infrastructure projects. Generally, for the hospitals with LPA real estate, the manager's role consists in initiation and funding identification. Furthermore, the project management suffers various implementations from case to case, depending of the funding source or the relations between the management of the hospital and the respective LPA. It is a common practice in LPA managing the projects.

Action 20 MH and LPAs should decide over the role the managers have within an infrastructure project, however, no project should be implemented unless: (i) the manager approves it, (ii) any contract is agreed and signed by the manager, (iii) the hospital is part of any contract with the right to monitor the works.

Decision maker	MH, LPA, MAI
Time	4th Quarter 2010

Context for investments in hospital infrastructure

The planning of new buildings and facilities is a major investment decision involving many people with different needs and perspectives, affecting the quality of health care for many years to come. The requirements of accessibility versus privacy, optimum space utilization versus provision for future developments and visual attractiveness versus ease of maintenance, are some of the balances which have to be struck. At the stage of detailed planning an ability to interpret plans is essential, and for planning of new and revised services a capacity for detailed analysis of procedures and systems is also necessary.

Major capital investments in hospital infrastructure are usually regulated and planned separately from operational procedures. In many countries the hospital plans are developed at regional level but within a national framework and regional and (sometimes) national authorities are also involved in financing major Investments. The approach to health care planning largely reflects the health system's institutional, legislative and regulatory framework, as determined by the wider political, social, economic and cultural system of the country. There are strong theoretical and, increasingly, empirical arguments for establishing mechanisms to plan the capacity and configuration of health facilities.

Health care workers, as the largest input into health care, are critical to the success of capital investments.

Action 21 To develop a Master Plan for investments in hospital infrastructure at the national level taking into account all the contextual aspects related with hospital infrastructure investment (demographic changes, changes in the population morbidity, human resources involved) and the trends at the European level.

	Decision maker	MH, LPA, MAI
	Time	2010
Action 22	Making a national priority from the high-tech equipment investment, build an action plan to be followed for the next 5 years.	
	Decision maker	MH, LPA, MAI
	Time	2010
Action 23	Starting to make a systematic planning of the health care workforce	
	Decision maker	MH, LPA, MAI
	Time	From 2010 ongoing
Action 24	Starting to develop and to improve mechanism and good links between the different levels at which planning takes place (hospitals, PHD, LPA)	
	Decision maker	MH, LPA
	Time	From 2010 ongoing

The relationship between capital investment and the process of health care delivery. In many countries, very often the cost of the building were not taken into consideration when were decided the cost of medical care. In Romania in the last 20 years, the investments in hospital buildings have been minimal, and it is the time to put the question if we need to maintain the old buildings or we need to have new hospitals. Often, maintaining old, failing buildings is far more expensive in the long run than building a new one. Although it is tempting to solve only today's problems, there is widespread recognition that this does not amount to an eff ective application of health capital investment. Health care buildings should be built, renovated, or reconfigured to meet future needs – as far as this is possible.

Action 25	For every investment to conduct an analysis between the initial investment and the cost of the building over its life-cycle	
	Decision maker	MH, LPA
	Time	From 2011 ongoing

Hospital infrastructure investment and efforts to improve the quality of care

The trend in the recent years in medical care all over the Europe is to try to maintain the health care cost, to raise the level of technical efficiency and to improve the quality of care. Long time was a general belief that quality in health care is close related with cost increase, but the last evidence in scientific literature show that the opposite is true. Taking into account the new evidence, the hospitals must deliver high quality health care, maintaining a high degree of access for population and through the collaboration with other health and social services .

The locations, the arrangement of the physical space of health facilities, the infrastructure and the equipment, have an important impact on the quality of health services.

Action 26	Develop a information system about the hospital quality standards required	
	Decision maker	MH, LPA and National Commission for Hospital Accreditation
	Time	From 2010 on
Action 27	Develop a transparent system for informing the patients on hospital quality standards (at least information on the hospital webpage)	
	Decision maker	MH, National Commission for Hospital Accreditation and hospitals
	Time	From 2010 on
Action 28	Patient satisfaction with health care services is an important measure of population' experience with the health care system. Introducing this indicator in order to measure the performance of hsopitals and the quality of care.	
	Decision maker	MH, National Commission for Hospital Accreditation and hospitals
	Time	From 2011 on

		Qrt 1 2010				Qrt 2 2010				Qrt 3 2010				Qrt 4 2010				Qrt 1 2011				Qrt 2 2011				Qrt 3 2011				Qrt 4 2011			
I	Hospital infrastructure strategy																																
1	Hospital evaluation																																
2	Selecting the hospital infrastructure priorities																																
3	Enable the infrastructure funds transparency																																
II	Decentralization process																																
4	Design new regulation and establish the roles																																
5	Train adequate human resources for planning health care at county level																																
6	Changes within L95/06 by turning over the investment responsabilities to LPA; MH funds are only for																																
7	Change the Management contract to include as a third party the LPA																																
III	Capacity to apply for EU funds																																
8	The project evaluation should be carried out in correlation with hospital infrastructure priorities																																
9	Separate the funds for ambulatories and county hospitals																																
10	Information campaign among hospitals and LPAs																																
11	The hospital manager is assigned a decision role within ROP applications																																
12	The ROP applications should have included the hospital as a key player;																																
IV.	Hospital Management Training in SNSPMS																																
13	Introduce interaction, share experience, and solution finding exercises																																
14	introduce additional courses; i.e. project management																																
V.	Management contract																																
15	Include specifications over the role within the infrastructure																																
16	Include the LPA as a third party in the contract																																
VI.	The managers' capacity to run infrastructure projects																																
17	Increase managers' knowledge and motivation																																
VII.	Hospital site management																																
18	Transform the secondary hospital locations in cost-centres or as new hospitals																																

VIII.	Real estate administration contract	
19	The manager / hospital should be re-invested with the real estate adminsitration role	
IX	Manager's role within the infrastructure projects	
20	Political decision over the role	
X	*Context for investments in hospital infrastructure*	
21	Develop a Master Plan for investments in hospital infrastructure at the national level	
22	Making a national priority from the high-tech	
23	Making a systematic planning of the health care workforce	
24	Develop and improve mechanism and good links between the different levels at which planning takes place	
XI	The relationship between capital investment and the process of health care delivery	
25	Conduct a analysis between the initial investment and the cost of the building over its life-cycle	
XII	*Hospital infrastructure investment and efforts to improve the quality of care*	
26	Develop a information system about the hospital quality standards required	
27	Develop a transparent system for informing the patients on hospital quality standards	
28	Introducing the patient satisfaction as indicator for quality of care in hospitals	

Table 26 - Action Plan Schedule

XVI. MAJOR FINDINGS

The need of having a strategy regarding the investments in the hospitals' infrastructure. Even if at declarative level there were signals of the new government adopting the main objectives of the previous government, it was felt the necessity of having a strategy adopted through government decision. Such a strategy could either change some/all of these objectives or could continue the previous strategic guidelines. In early April 2009, a political statement was issued by the minister of Health, pointing out the continuation of the new hospitals construction but confining for the moment at only 15 hospitals, of which 7 emergency regional and 8 emergency county. Even this reduced number is under question in the "present financial context" as the same statement underlines.

Suggestions. (a) Issuance of a Government Decision regarding the strategy that is going to be adopted by the Ministry of Health and the way in which it will relate with the previous objectives settled by the previous governments. (b) *A political statement regarding the investments in new hospitals* - having also in view the previous tenders launched by the previous government for building new hospitals, as well the current stage of the tenders/contracts for the 19 new emergency county hospitals and for the 8 regional ones as well as for the 10 hospitals from Mures county, it would be important to clearly state whether these new hospitals will be built or not *(this statement was already done since the first final draft of the report)*.

The framework of granting funds for hospitals' infrastructure. The criteria used by both the Ministry of Health and the County/ Local Councils in regards to allocation of funds for capital expenditures are not known.

Suggestions: (a) Evaluation of the degree of hospitals' usage. An assessment of the hospitals, should be made by the Ministry of Health together with the County/Local Councils (where these ones are the owners of the real estate). Such an assessment should identify the hospitals that should be kept, the hospitals where the number of beds should be reduced and the hospitals that should be turned into ambulatory health care centers or into palliative centers. The final result of this analysis will be the setting up of the optimal number of hospitals necessary in Romania, depending on the healthcare services needed for the served population. (b) Drawing up of an *action plan regarding the transfer of services which are not hospital-related ones* from hospitals to other service suppliers. This would be the case for example for chronic diseases, for elders, for social services and this action should be accompanied by the redefinition of the hospital services that are absolutely necessary to be provided at this level.
(c) *Prioritization of investments*. The limited amount of funds available for infrastructure and especially their decrease with 52% in 2009[32] comparing with 2008, is leading to the necessity to prepare an analysis that should dwell on the criteria according to which investments in certain hospitals' infrastructure will be selected. (d) *The transparency of the allocation of funds for infrastructure.* A transparent granting of the funds from the Ministry of Health should be pursued and this could be achieved by their publication on the institution's website as well as by drafting clear methodologies for using the financial resources.

Risks of compromising the investments in infrastructure. The delay of the investments in public hospitals determines the appearance of the following risks

- *Migration of the medical staff* especially the highly trained one) in other countries, in big cities or in the private sector;
- *Migration of patients* to well trained doctors located in big cities or in the private sector;
- *Increasing competition of private hospitals.* The possibility of obtaining from HIHs of a discount for the medical services provided by the private hospitals creates a good premise for the development of this kind of hospitals. Not being able to provide better conditions within the public hospitals due to poor infrastructure may lead to a migration of the medical staff and of the patients to the private hospitals. Two such cases are relevant, the "Pelican" Hospital from Oradea (where many doctors from ECH Bihor and patients moved – October 2008) and the Private Center for Hemodialysis in Botosani that left without any patient or medical staff the hemodialysis unit from the county hospital Botosani, leading to its dissolution.

Suggestions. (a) In order to eliminate these risks it is necessary to *speed up the fund allocations* for infrastructures of hospitals. (b) The Ministry of Health and the County/Local Councils will take into account both the demand for specific health services and the offer of medical personnel as well as the offer of medical services from private hospitals when an investment is to be funded.

The process of decentralization continues the previous policies. The new management of the Ministry of Health has taken over the action guideline drawn up by the previous governments regarding the decentralization. The statements of the new minister in this way, as well as non obstruction of GEO no. 162/2008 confirm this hypothesis. However, a non-structural

[32] *According to the budget law 18 /2009*

modification interfered in the pilot stage development, as initially at Oradea it was proposed a merger of the four hospitals into a single one. There were statements of the managers of the four hospitals expressing their disagreement regarding the merger. The area leaders of the syndicates declared themselves as neutrals. Finally, it was published GD no. 1716/2008 that repealed the merger of the four hospitals.

Vagueness regarding managers' subordination after decentralization. Political actions and messages regarding the decentralization indicate a possible double subordination of hospital managers, one to the Ministry of Health and the other one to the County/Local Councils. Because clear procedures are missing, institutional malfunctioning may arise and may hinder the development of the investments.
Suggestion. It is necessary a coherent setting up of the subordination guidelines or at least an increasing of the autonomy of the hospital managers in order to avoid the current interferences or, in the future, on behalf of two superior institutions: the Ministry of Health and the County/Local Councils.

No common institutional structure inside County/Local Councils for hospitals. There has not been noticed any common action among DCs regarding setting up departments responsible for hospitals, even though the ownership of the real estate was transferred in 2002.

Suggestions. To determine DCs and Local Councils to adopt a common policy regarding the institutional organization for hospitals. Thus, those DCs and LCs which own more hospitals should have a distinguished department for hospital infrastructures. When the transfer of administrative and financial competences would occur, this infrastructures department should operate within the new health local authority. In the districts where just one or few hospitals are owned, there should be appointed clearly, a department which would have additional hospital infrastructure responsibilities, too.

Lack of an action for informing the hospitals with respect to the existence of ROP grants. It is not known anything about the existence of any information report of the Ministry of Health to Hospitals for promoting the Axis 3.1., ROP. Out of a total of 26 projects submitted to MAROP (the 12th of February 2009), 18 are focused in 5 counties: HD, BH, CT, BR and CJ. And in terms of what regions are concerned, more than a quarter of the projects are from the S-E Region, where the allocation for all the years until 2013 was already exceeded. Taking into account the need for investments in hospitals, the number of projects submitted is low and so it is the sum requested up to now for the projects submitted until this moment. Euros 48 mills. / 173 mills. There are two regions where no project had been submitted.

Suggestion. Development of an information campaign of the Ministry of Health towards all the subordinated hospitals whose buildings belong to the County/Local Councils. This campaign may take the form of some simple and brief recommendations regarding the conditions to access the structural funds available through ROP Axis 3.1.

The inutility – in the current period –of the Feasibility Studies for the 15 county hospitals. The Feasibility Studies (FS), performed through the Ministry of Health for the 15 county hospitals chosen to be rehabilitated under the ROP-Axis 3.1, cannot be used within ROP. The works mentioned in the Feasibility Studies (capital repairs, demolitions and new constructions) are not financed by ROP. Moreover, the sum estimated for any hospital easily takes ¾ of the total available amount through ROP Axis 3.1. by 2013(e.g. ECH Targoviste would require Euros 140 mills, and the available amount under ROP – Axis 3.1. until 2013 is of Euros 173 mill). As a consequence, the incompatibility of the FSs at this moment hinders the rehabilitation of these hospitals by using the ROP funds. A decision is going to be adopted, regarding the utility of the FSs that were done and the way in which the nominated hospitals may benefit after all by the funds from ROP.

Suggestion. Preparing again the FSs in order to comply with the conditions of ROP as financing source. In order to avoid the complete inutility of the amount paid for preparing those FSs, there should be used parts of the FSs that have been already prepared wherever it is possible (for example, the rehabilitation of a pavilion unit).

Lack of collaboration between the Ministry of Health – County Councils – MAROP regarding the fund accession under Axis 3.1. The 15 chosen hospitals and the County Councils (CC) are confused and no coherent and synthetic information concerning this issue was provided by the Ministry of Health. A County Council even raised the problem of interrupting the funding by ROP in order to avoid the absorption of the funds only by the ambulatory health care units of the other hospitals than those 15 ones.

Suggestion. *Starting of discussions by the Ministry of Health* with the County Councils, the 15 hospitals and MAROP in order to identify funding solutions by using ROP also for the 15 involved hospitals.

ROP – Axis 3.1. - Incertitude over projects ownership. Hospital Infrastructure Projects funded by ROP Axis 3.1. might be affected by an institutional problem regarding the project ownership when the implementation starts. The promoter is

District/Local Council, but the beneficiary is the Hospital. If no closed collaboration between these two institutions and strict procedures developed, problems may occur in the implementation phase.

> *Suggestion* MH, DCs and MAROP should asses this risk and regulate the collaboration during the project implementation, such a procedure would be the hospital staff included in project management unit.

District/ Local Councils funds contribute to general public health budget, but their data are not centralized. Usually, when an analysis is developed over the health budget, is considered only the MH and NHIH budgets. DCs/LCs budgets for hospitals should also be included in such an analysis. Since 2002 when the real estate of more hospitals was transferred to them, major part of infrastructure investments is on councils funds. The consultant has launched a survey to collect these data, to centralize them and to improve the health budget data. The survey's results foresees a major contribution of local / county budgets to the health sector.

MoH imposes a pretty complicated and time-consuming bureaucratic process in providing funds for investments. The hospitals comply with, yet MH doesn't follow the same harshly manner in planning and releasing the funds. Thus, the hospitals face problems in planning an investment and in developing a real budget.

Major parts of infrastructure projects are financed by LC/DCs*, however, it seems like these funds are not so predictable* to be included in a hospital budget.

> *Suggestion*. A better collaboration between LPAs and hospitals is required, in which hospitals should be informed and to agree on the investment plans.

The bureaucratic procedures burdening the infrastructure projects determine the hospitals to apply certain methods to avoid this procedures. Thus, a solution is to establish a foundation by which the sponsorships and donations are carried out.

> *Suggestion*. One might be worth to engage a study to compare the steps, time and costs of an infrastructure project carried out by a private hospital versus a public one. The findings of the study would bring out improvements in the infrastructure projects of public hospitals.

The process of an investment is long because of the outfit of approval and re-approvals. The process for an investment is a long one, especially because one must obtain a huge number of approvals and notes from plenty of agencies and public organizations. In case of an investment whose accomplishment may take many years, at the end of each year there have to be re-done some stages of investment's approvals and the budget should be annually made up.

> *Suggestion. Multi-annual Budget.* This process may be shortened by the approval of a multi-annual budget; otherwise, the syncope that arises because the budget was not approved at the end of the previous year (the 31st of December) may have as consequence, besides the extension of the term for finalizing, the degradation of the already built construction until the approval of new budgets happens.

Even though the 15 hospitals were considered as first priority for rehabilitation through ROP Axis 3.1., the fund pace for each region only with the ambulatory sections. The fact the 15 hospitals were included in the list represented a barrier for them in accessing the ROP funds.

> *Suggestion.* The ROP funds should have the same procedures both for hospitals and ambulatories.

MH budget for investments posts a significant reduction both in % of MH budget and in absolute figures, too. Since 2002, a sharp downturn occurred for the investments' share in MH's budget, from 32.9 % in 2000 and 38.1% in 2001 at 10.1% in 2002; the record low, after 2000 is to come up in 2009 when 72.22 million lei is to be allocated for health investments; that means 54% lower than previous year, in current prices. Over the last ten years, the initial budgets allocated for health investments suffered reductions against the adjustments done within a fiscal year. Thus, even though the general health budget was upward adjusted, the investments' one didn't. Thus, despite, some political statements and commitments, the year 2007 is marked by a record negative adjustment in health investment budget, being cut with more than 50% versus the initial budget approved.

A non-functional National Commission for Accreditation of Hospitals still in place. In order to have a health care system which functions based on quality standards it is absolutely necessary to have in place and to be functional the National Commission for Accreditation of Hospitals which will evaluate the overall ability of the hospitals to provide quality care and will look at facilities, staff, equipment, processes and health care outcomes. The institutional framework supposed

the respective commission would be subordinated to the Prime-minister chancellery, but the last one was dissolved by the new Government in place.

The efficiency and effectiveness of the hospitals is related to a well developed primary health care services or other type of services necessary for patients before or after being discharged from hospitals. In this respect, investing in primary health care (medical equipment and modernization of practices) would be an asset for the future development of the Romanian infrastructure hospitals.

In a Project Cycle Management with MH as a funding source, the main gaps were identified as:

- The hospital need to pay consultancy services required for the infrastructure investment proposed, but it is unknown whether the investment approval and the availability of the funds. The non-approval of an investment within a year requires the update of certain surveys, permits and studies.
- When the implementation period exceeds December, then the bureaucratic procedures imply the re-approval of the investment and budget.
- Not all the hospitals have hired qualified staff for carrying on an investment. The manager made decisions or approvals in several important steps without having the required qualifications and experience.
- The lack of specialized knowledge in construction and costs of hospitals staff, members in the bids evaluation committee.

Either the funding source, an infrastructure project follows the same major steps, yet some differences occur for hospitals domain in keeping with the funding source (MH, DC/LC) and hierarchical links, a hospital being, presently, subordinated in terms of management, either to MH or to DPHA. Thus, when the investment is done through the DC / LC funds the responsibilities of the hospital are at a minimum level and the major part of the tasks are taken over by the DC / LC. Moreover, in terms of cycle steps, the process is less time consuming as many of the approvals steps are passed in the same institution.

Differences in the process are noticed in comparing with ROP - Axis 3.1. funding procedure; thus, within the identification phase are encountered the most ones: the justification of the investment requires different documentation.

Managers' Training

The general approach is to memorize notions more or less relevant to the managers' current position rather than training for solving a current problem the managers face with. The course strategy is mainly focused on theoretical approach and less on efforts designed to build and develop skills.

Presently, the establishment of working groups and students' reluctance to interaction stand for two major obstacles. The trainers do not motivate participation but also because most students hold important positions or expect to and therefore their prestige reaction is quite high.

The modules presenting the worldwide existed situations / problems don't customize the scenario according to the national context or specific hospital.

To manage the hospital infrastructure projects is not clearly addressed in any of the 7 modules. As such, this theme's components (defining hospital investment, funding procedures, funding sources, investment bases) are neither directly nor indirectly tackled. Moreover, Hospital Management Course does not include a project management module.

- Interaction with current or former managers would avoid the excessive theoretical look, the often sophisticated build of the material, and the distance from daily concerns and last but not least the tight, unattractive format.
- Questioning the situations is definitely more supportive for students rather than just presenting.
- To be included specific courses on Infrastructure project management;
- To be included courses regarding the new trends in designing a hospital, new infrastructure techniques as well as updates on medical equipment and hygienic standards.

Manager's roles

Presently, the general view indicates that within an infrastructure project, the managers are mostly involved on investment needs assessment, funds identification and obtain the funding approvals. It is a common practice in administrating the infrastructure projects by LPAs, which came over a gap of clarifications in this region corroborated with a lower capacity of managers to run such projects.

Within the private hospital surveyed the manager's role is confined to an advisor in design. No other task or responsibility. The logistic department administrates the investment project.

Within the recommendations made by the managers and by LPAs representatives prevails a certain one: *"Ensure the LPA support"*. The conclusion would be that in order to have investments in the hospital a manager cannot rely on LPA unless "softens" the relations with LPA representatives.

A clear difference between LPAs hospitals and national hospitals emerge when it is about infrastructure project's management. Whereas, for the national hospitals, the projects are clearly administrated by managers, in the LPAs ones the administration of the projects were turned / taken over by LPAs with or without managers' agreement.

The manager fills a "middle-man" role in the collaboration MH and LPAs. Thus, by manager's effort there have been launched projects with dual finance, MH and LPA. When the manager is not included in this equation, it is likely this collaboration vanishes.

The major improvements within the infrastructure process were identified by managers as being: tenders framework for public acquisition and simplifications in obtaining the required permits,

Within the panel survey, the great majority of managers - 81 % - haven't administrated, in any respect, projects over 1 million euro; moreover, 1/3 of the projects are less than euro 100,000. No project finished over 5 mil euro. These data are relevant in the context of administrating projects valuing much more than the managers are used with. For instance, the initial feasibility studies for hospitals rehabilitation are worth at least 100 mil euro.

By June 2009, in almost 18 months since its launching, a number of 27 applications were submitted to the Management Authority of ROP, meaning less than 8% of the total eligible hospitals.

The survey's results present a lower capacity of managers to administrate for this moment, the complex infrastructure projects. The main reason is the lack of experience in conducting infrastructure projects either because of funds shortage or LPAs as the body who administrates these projects.

In the present conditions when the role of the LPAs takes more consistency, it is a need to update the management contract in accordance with and to bring more specificity in the responsibilities and rights the manager has within an infrastructure project.

The hospital is perceived as a renter of the LPA, even though there is concluded a contract between the LPA and the hospital which confers the role of an administrator the hospital has. Under this role, any project must be administrated by hospital. However, this contract is largely unknown by various stakeholders and much least applied.

Suggestions:

- MH should decide over the role the managers have within an infrastructure project by considering the role the LPAs have.
- No project should be implemented unless the manager approves it.
- The hospital has a member within the appraisal teams of tenders, with the power to say "No".
- The hospital should be part in the construction contract, with the right to monitor the works, to bring up modifications during the works if it is a must, and to be informed about the progress.
- The manager should fill a consistent role within the ROP applications;

XVII. EPILOGUE. A patient's experience[33].

When you enter in a western hospital, you get into a machine. When you come out, dead or alive, you bear all the marks of the standard procedures you went through. No surprise, no approximation, no mystery. When you come into a Romanian hospital, you get into a literature page. The procedures come unpredictably; one hesitates between doze and perplexity, between palpitating precipitation and Turkish sluggish, between bitter rules and Balkan relativism. You have maternal sentiments (you get tabletty and choppy-chowy, you are invited to raise your softy hands and take off the little pajamas), as well as pedagogically warnings or boring bureaucratic cool attitude. It is adventurous, it is human, and it is "full of life". Precariousness stimulates the imagination. Everybody - doctors, nurses, patients – looks for ingenious solutions for problems which, normally, are solved in a routine. Goodwill alternates with exasperation. The organization leaves always room for random procedures, bad or good lucks. It is adventurous, it is exciting. You don't bore in. I mean, it is like beyond the hospital's walls. You are not in other world: you are home. And everybody manages himself.

Lately, I have experienced both the western efficiency and domestic lyric prose. I have inerasable memories. For instance the meeting with a body bearer from an X hospital (domestic), where I had to have a heart control. The procedures involved a period of immobility for several hours after the tests. Within the banal capitalist hospitals you are transported from your room to the respective lab with your rolling-bed and brought back in the same bed. In our country, the bed in the room it is a strong one, matrimonial, difficult to be moved. Therefore, you walk to lab and come back with a barrow. The problem emerges when you need to get down from the barrow to your bed without any move. Another problem is that the barrow doesn't fit the room door. It is the time when the body bearer comes up into scene: a petty and willingly boy, compelled to solve the things with his own means:. „I gotta put you in your bed", technically, he announces me. "And how we could do that?", I asked, somehow, confused. „I bear you!" "You don't know what are you talking in about." – I say, ropy smiling. "I am over 100 kilos!" „That's nothing for me. I'm used with." replied the boy, in a good-natured manner. Whereas, I was about to bring up more arguments, the boy started his job. He takes out a leathered belly band, a belt – that kind the porters hang with to carry pianos and furniture. He rapidly put the reins on, with expert's moves and until I was about to say anything else, he catches me up, like a hypertrophic child […].

You cannot live something like this into a civilized "location". Any human contact, any emotion, any psychic feeling are excluded there. And, whereas, the western hospital it is a place with no memories, our ancestral hospital is a never-ending source of memories, like the one I've already told. By the way: are there any schools for body bearers training? Or we have to fill our hospitals with recycled philosophers, capable to bear high tonnage patients by the power of their minds? But this is an education reform, which if not on this mandate but the next one, either the Government or the Presidency will clear it out.

[33] The fragment is an article written by Andrei Plesu, in the magazine "Dilema Veche", 19th July 2009. Andrei Plesu is a famous writer in Romania; he filled also public positions as minister of Culture, minister of Foreign Affairs and President's counselor.