The Human Resources Information System: An asset of service optimization for company Case: OCP Group

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Abstract: The Human Resources Information Systems (HRIS) have become key factors of success, because they contribute to the competitiveness of enterprises. Through this research, we are trying to respond to a crucial question: What is the contribution of the HRIS on the optimization of HRM within the companies? Therefore, we will seek first to clarify the notion of the HRIS and then examine a case practice: in the Office Cherifien of Phosphates (OCP) via a survey. The results obtained showed the important changes that occur on the market, the companies are driving to develop an HRIS in order to respond the expectations of the staff and constraints of the HR, to ensure their sustainability and to face the competition.

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I. Introduction

Currently, the new technological and economic changes alter the competition’s rules within the companies. These are more often the constraints imposed which companies must adapt.

The growth of a company pass necessarily by a large volume of activities and a large amount of information to manage and make good decisions. This mass of information, focus on the environment of the enterprise and on its resources. Now we observe the emergence of a new economy of the information, where the work in relation with the information has become more important than the work in relation with the other sectors.

Today, all of the firms are in a situation where the competition is more and more important. Thus, the terms of "profit" and of "profitability" have become important topics. In addition, the strategies that had put in place are not sufficient to cope with the changes suffered by the market as well as to the new requirements of the application that are more pointed.

Before these various developments, the companies have had to put in place new strategies to be able to remain profitable while keeping a competitive advantage. For this, they are going to try to combine the strengths of their different services in the doing more work and efforts.

It is at this level that the role of the Human Resources Services (HR) will become strategic. In effect, the company needs to have a more flexible organization; The HR will have an aim is to combine the satisfaction and profitability. HR will have to manage a large mass of information in a shortly time.7

Starting from the years 60, the responsible HR are interested in the possibility of computerizing certain tasks or activities of their functions, including those that are repetitive or creative little benefits. This solution would free up time for them, the latter could then spend more time on other tasks whose value added is more important.

The first application designed with the intent of the Human Resources Service has been the management of payroll in the years 1970-1980. However, this application designed for large enterprises since, within the Small and Medium-sized Enterprises, the management of the payroll was the case of the accounting officer or sub-contractors manage officer.7

The new regulatory obligations and the trend to the scan will push more and more activities HR to their computerization. This will lead to the modification of the practices and principles of HR.

3HRIS Circle. Gérard Berry, Jean-Marie Peretti, " the HRIS: issues, projects and good practices", page 12, 2nd edition, Editor Vuibert, collection the references.
Some functions will even be dematerialised shares, as the process of recruitment, with the passage of the CV on paper sent by postal mail, which responded to an announcement in the journal, to the public profile, which broadcast openly on the Internet. But also the follow-up to the training, the follow-up of the careers and skills.

It is from here that intervenes the concept of the Human Resources Information System (HRIS). It is a tool that will be placed at the disposal of the HR department and which is inserted within the Information System (IF) of the business, where the appellation "HRIS". The fact of moving from a standard management to a computerized management will allow to simplify the management of the Company (The HR activities), to have a more comprehensive view but also open plan. This tool will not only help to automate procedures, but also to accelerate the time limits as well as to facilitate the dissemination of information.

Since the database is richer in information, the RHR will realize that the HRIS allows a gain in productivity and the increase of the reliability of the data, show them that it can become a help during the decision-making, and allow the anticipation of certain situations or consequences related to the decisions taken.

Certainly, this information system brings advantages to the company, but with risk and complication. It has not always accepted by the employees. In some cases, employees believe they are going to have to suffer, because they are going to have to learn new things, new ways to make, and a new management, which is not always accepted by all.

The OCP has decided to launch a comprehensive overhaul of its information system, while relying on the best technologies of the market. The main purpose of this new information system is to develop and implement the strategy and the tactics necessary to the achievement of its objectives in order to improve its position in a competitive environment.

The article aims to show the tools and importance of HRIS in all companies, so our study will be emphasize on the OCP Group.

There for, we are going to response to the following problem:

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<tr>
<th>What is the contribution of human resources information system in the service optimization of HRM of a company?</th>
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<td><strong>II. Theoretical Framework</strong></td>
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| In 1990, Tannenbaum publishes the following definition: An HRIS is a system used to acquire, store, manipulate, analyse, sort and distribute relevant information concerning human resources in an organization. Hendrickson (2003) specifies that it is not restricted to the technical (computer hardware, software applications) but also incorporates the individuals, the policies and procedures, the data required to manage the HR function. The emphasis is on the uses, but a certain confusion emerges with respect to the infusion of technology in the HR function. Even if it is common for a company to use an HRIS, authors such as Ball (2001), Tansley et al. (2001), Kovach et al. (2002), Bassett et al. (2003), stress that its operation is not optimum and remains at the stage of the administrative management. Finally, according to Harrison and Deans (1994), the HRIS includes the file of the staff as well as the procedures of the management planning of the employment, management of recruitment, management of the training, career management and skills, management of remuneration.

Today, an HRIS presented as a system integrating software bricks able to automate a number of tasks related to the management of human resources and to ensure a follow-up. We can therefore summarize the definition of a human resources information system as an integrated information system reserved for areas of human resources. The HR take many operational decisions, functional and strategic, based on relevant data and information characterized by levels of reliability, security and privacy.

The Group OCP has always affirmed the central place of its human resources whose quality and commitment are an essential asset in its success. Reactivity and initiative, creativity and innovation, humility and ethics in the conduct of the affairs, direction of the team and the ability to work in "Project Mode" are the qualities shared by all the collaborators of the Group.

8Annual Report 2011 "Human Resources Management", the human resources at the heart of the growth, page 56.

8OphélieCastillo, " The Human Resources Information System within the Small and Medium-sized Enterprises". Memory of End of Studies 1st year Master Strategic management of organizations, Course Management of Human Resources, University of Reims Champagne-ardenne, year 2011/2012, p.2.
"The Group OCP has an arsenal of developed applications home and dating from the years 70. This system has an undeniable strength since it constitutes a reliable database and that it meets the specific needs of our group while strongly controlled by the staff.

The modernization had become a business project, and the decision to equip the OCP of a comprehensive information system, modern, reliable and backbone the system was taken in 1996. It is as well as Netphos-finance, Maintenance Management assisted by computer and HRIS (Human Resources of Information System), three major projects, have seen the light of day”. Explanation with Saïd AMOUZOUNE (Head of the project HRIS, 2011) 7

III. Problematic&Method

The HRIS begins to have as much importance in all the companies, the study it will be more particularly on the OCP society one of the world leaders on the market of phosphate and derivatives, and an actor of reference on the international market since its creation in 1920.

This article attempts to deal with the following problem: What is the contribution of the HRIS in the optimization of HRM in the service of the company?

Our choice of collection of data focused on a quantitative survey, in order to proceed to a statistical study with a view to quantify some phenomena.

After study of the two types of data collection, qualitative and quantitative, we find that the quantitative survey met our needs perfectly in the light of the purpose sought. In effect, we wished, during this study to assess the contribution of the HRIS in the optimization of the activities of the management of human resources (pay and administrative management) within the OCP (the area of Khouribga), and more particularly in the service of the administrative management and payroll.

The targeted population in this investigation” The actors of the HRIS system”. The questionnaire is composed mainly of a closed question that is to say with modalities of response pre coded, in order to proceed to a statistical treatment.

Taking into account the target population, which is essentially composed of the HR staff that have responsibilities on the HRIS, we used a vocabulary technical and precise, familiar with these HR professionals.

We have drafted this questionnaire according to the principle of the funnel, that is to say ranging from general questions to the more specific questions.

IV. Results

In the framework of an ambitious strategy of economic growth, the Group OCP has identified new challenges to improve its management, its processes, its performance, its productivity and the quality of the goods that is produces in order to remain competitive in an increasingly competitive market.

The Group OCP has undertaken a comprehensive reform of the latter and this through the NETPHOS project. This project will replace in the long term the majority of old applications developed internally by a solution package. It also provides a means to make other features and treatment in phase with the new needs of the users.

The choice of the software package solution has several advantages:

- Improve the reliability and security of exchanges and facilitate the access to the information.
- Expanding the Functional perimeter in integrating new features at the level of treatment of analysis of the data and the Dashboards.
- Improve the technical infrastructure: transition to an architecture more advanced which ensures a level of quality much higher than that provided by the architecture of the old system.
- Reduce the cost of maintenance of the system of information, thanks to the synchronization of the treatments, scalability, adaptability, and maintenance performed by the editor …

4.1 The Functional perimeter of the solution:

The software package "Oracle Applications", which has made the choice of Group OCP for the first areas implemented, allows manage all of the business processes of the company by integrating features in different areas such as the management of human resources, financial management and accounting, the sale, supply, production...

Each business cited above presented in the form of a module at the level of the software package that manages all modules in an independent manner by sharing the same source of information (the same database) unique and common to the whole.

The diagram below illustrates the distribution of the modules covered by functional area in the framework of the project NETPHOS:

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7 internal review of the OCP group N°3 Quarter 1 2006, "reportage to Phosboucraâ ambition of a group, a challenge of a Subsidiary"
Area "Payroll & Management of Human Resources"
The payroll is the central element of the field human resources. Other functions are also covered by the Oracle module HRMS to know the administrative management of the staff, the management of the training, the management of recruitment, career management, the management of skills and the management planning. The features of this module described in detail in the following paragraph.

For applications, specific trades developed internally in order to retrieve all the flows and treatment of information of these applications and centralize to modules concerned of the Oracle software package applications.

Area "Finance and Accounts"
The modules relating to the field "Finance and Accounting” ensure the management of accounts: auxiliary (Supplier Accounts and Accounting clients), general, analytical and budget, in addition to the management of capital assets. This area centralizes all the flow of information from other modules. The information transmitted to the Oracle module General Ledger (GL) allow you to perform the valuation of stocks in real time, the calculation of the costs of returns, the accounting provisions necessary, etc.

Area "Commercial and Management"
The Commercial management is ensured spoke module Order Management (OM), it encompasses all of the features that essentially the sales administration, such as the billing, the taking customer orders, the management of expediions...

Management of the production
The Oracle module Process Manufacturing(OPM) ensures the management of the production assisted by computer (POAG). This area covers the main management functions of the products, resources, processes, stocks of finished products and semi-finished goods, the planning, the costs of industrial returns,…

The management of maintenance and logistics
Three modules cover the field of management of the maintenance and logistics:

- Enterprise Asset Management (EAM) manages all aspects of the maintenance to know the management of the repository of equipment, the management and the valorisation of the orders of the maintenance work in terms of planning and monitoring, …
- Inventory (INV) provides managers of the stocks the possibility to ensure a follow-up of stocks in real time, perform inventories plan the replenishments and anticipate the applications.
Purchase Order (PO) for the management of the procurement process, essentially the management of supplier repository used by the module AP, purchase requests, calls for offers, orders, receptions ...

For a good mastery, it decided to carry out following a breakdown by functional area as shown in the figure that follows:

**Figure n°2: The planning of the project NETPHOS by business area**

Each module topic in production in the overall computer system, can act on the modules already in place and thus to modify their settings.

The Management of Human Resources covers the whole of the functions and measures with the objective to mobilize and achieve a powerful development and sustainable development of the staff, for greater effectiveness in support of the strategy adopted by the company. It encompasses many areas involved at all stages in the management of personnel: the recruitment, career management, training, performance evaluation, the forward management of HR, the motivation and the involvement of the staff, communication, satisfaction and compensation at work, etc.

At the level of the Group OCP, the HR trades are subject to the stresses of more and more important, of a growing mass of treatments to perform, requirements and new expectations of associates, where the need to put at the disposal of the HRD reliable tools dedicated to the service of the HR management.

The project for the computerization of the system of management of Human Resources entitled NETPHOS-HRIS allows you to simplify and improve the reliability of the flow of information within the Group OCP, and essentially aims:

- The simplification of the tasks the more repetitive tasks as well as the establishment of circuits of work efficient and effective via their automation, which brings a gain of time important.
- The increase in the flexibility to absorb changes in process or organization.
- The ease of expansion and addition of new management policies.

**Figure n°3: The areas covered by the Oracle software package HRMS**

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Administrative Record</th>
<th>Recruitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>GTA</td>
<td>Remuneration</td>
<td>Training</td>
</tr>
<tr>
<td>Competition and advancement</td>
<td>Skills</td>
<td>Predictive management</td>
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</table>

4.2 *Functional perimeter of the solution "Oracle HRMS "*

Oracle HRMS has several modules of HR management divided by area of activity. The latter will be interfaced with certain applications that are maintained in service and will continue to operate: namely GESTOR (time management and activities), SPA (loans and advances), and management of medical coverage (medical expenses), management of competitions and promotions based on merit.
4.3 Oracle HR: Human Resources:

The HR module contains all the data relating to the organizations, for assignments, functions, positions, skills, recruitment, administrative management, the management of careers, to the management of contracts, to the management of absences and the seizure of the elements of remuneration.

This module will enable the OCP to manage:

- The whole of the activities related to the recruitment,
- All the data in the staff to know the data of the agent and the data relating to his family (spouses, children...),
- The jobs and skills,
- The mutual affiliations, insurance, and pensions,
- The statutory career of the agent: statutory advancement (of scale and step), tenure, reclassification, appointment to a position of responsibility, notation as well as the mutations,
- The different types of absences and leave of the staff,
- Accidents at work,
- Personnel management: seizure of items of the pays...

Oracle iRecruitment:

The recruitment cycle performed in HRMS since the identification of positions that need filled, the definition of requirements and the skills required, until the launch of the recruitment campaigns and to the treatment of applications, interviews, offers or releases. This done in connection with the internal network of the company where the vacancies are put online and where collaborators can submit their application through a procedure of integrated workflow, or also through the links of the external network of the company (Publication of offers on the web site, management of potential candidates).

Concretely, this module will allow the Group OCP to give the possibility to external candidates (and internal) to remove their candidature (CV) online (and automatically populate the database of candidates of the OCP), to update the information regarding their application for a post and follow the state of progress of their candidacy.

Oracle Learning Management:

Oracle Learning Management designed to manage the whole of the activities related to the management of the training within the company. It helps to build an environment conducive to the development of the skills of employees in accordance with the strategic objectives and for an appropriate cost and mastered.

This module manages all the dimensions of the vocational training: training plan, sessions, inscriptions, trainers, rooms, teaching methods, costs… It will allow the OCP to manage the whole of the management needs of the training, namely the organizational management training, the management and monitoring of the budget, the implementation of programs and training plans, evaluations, the measurement of the effectiveness of the training and the review of the actions of the training.

Oracle Payroll:

The Oracle module Payroll is a system of payroll management of human resources. Based on rules designed to adapt to the changing needs in the staff of the undertaking, it allows you to reduce the costs of installation, the time devoted to administrative tasks and the number of processing errors.

The Oracle solution payroll not only characterized by the flexibility and the robustness, but also by the processing speed and the reliability of the data. A flexible solution meets the current and future needs of each company.
Fully integrated with the E-Business Suite and in particular to Oracle HRMS, Oracle Payroll proposes a set of features related to the preparation, the exploitation and the liquidation of the pays:

- Definition of elements of pay.
- Parameterization of the plan of payroll.
- Calculation and edition of the payslips.
- Treatments post-payroll.
- Retroactive management of payroll.
- Annual treatments. This module allows the OCP to manage all needs related to the remuneration, including:
  - The management of the regime index, allowances and premiums, taxation (taxes), of the remuneration of a social character, of variable elements.
  - The management of all the allowances, premiums, deductions and loans for each agent.
  - The management of the retroactivity.
  - The treatment of the payroll for a part or for the whole of the staff.
  - The recalculates the pays only for individuals who have erroneous payroll, without proceeding to the resumption of the calculations for the whole population.
  - The Editions related to payroll.
  - The closing and archiving of payroll.

All of the modules of the following human resources are completely integrated and share including the tables of the collaborators, assignments, organizations, skills, and centers of costs...

### 4.4 GTA (field of the management of the time and activities “GESTOR”)

It will include the following elements:

- Management of attendance;
- Management of absences and activities under the Intranet;
- Definition of new rules for the management adapting the product to modes of management of the staff of the OCP;
- Automatic interfacing with payroll.

In order to ensure:

- The taking into account of the new rules of management (calculation of hours, ventilation of the time of presence, management of leave, etc.),
- The establishment of the new process,
- The automatic connections with payroll,
- The consultation and the editing of the individual data collective or on the attendance, absences, diseases, leave, etc.

![Figure n°4: Functional Architecture of the target system GESTOR](image-url)
The diagram General presents the general architecture of GESTOR. It includes:

**Elements of reference:**
- Basis of GESTOR staff.
- The organizations file and profiles.
- The table of values.
- The regulation of time and activities.
- The calendars, daily models and jobs of the time.

**The basic functions:**
- Function “management of presences”.
- Function “management of regular holidays and weekly rest”.
- Function “management of absences, diseases and detachments”.

**The expected results:**
- The movements of pays: the interfacing (connection between Oracle and Management).
- The counters and variables.
- The anomalies.
- The states and dashboards.

**Gestor.Net: time management**
Gestor.Net is a recent solution which enjoys all the know-how of GFI Chrono time in terms of development and which requires a implementation more "light". Particularly user-oriented, the advanced features in terms of Workflow And its intuitive ergonomics allow a "taken in hand" fast.

**The Portal Human Resources**
Intended for the whole of the collaborators, this portal implemented better respond to their requests and provide quality services. Custom content, approaches online, share features increased, ease of access to multiple resources, single interface, the portal now allows you to securely access, to a diverse range and extended HR services. It first provides a central space of information, news and HR documentation to keep you informed of new developments of the HR management.

The portal allows you to formulate and follow the different administrative requests, including requests for certificates and the requests for leave, regular and exceptional.

Hr "Services" is also an interactive space management and participation in the various social benefits offered by our Group. To this effect, you can register on-line for excursions or book stays in hotel establishments under contract.

It should notethe that the services of the portal is accessible to all the collaborators OCP, even those who are not equipped with a computer. For these latter, of delegated to the secretariats of the entities of the assignment will be used for the interface between the applicant and the portal.

They will enter the request on behalf of the person concerned and follow the treatment of its folder, up to the issuance of a response.

The majority of the services of the portal are already active. Others introduced as an according to a precise timetable and established by the project team.

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8 **Workflow:** collective task involving several individuals” before accomplish in a limited time of tasks articulated around a procedure defined with a global objective”. (N. Naffah, R. Reix, op.cit., p.20). This collective task is transversal to the services: for example, a recruitment process involves the intervention of the hierarchical superior applicant, HRD, and/or the recruitment manager, of the financial service, administrative employees, of computer services and accounting, of the occupational physician, etc.
The contributions of the HRIS system on the optimization of the administrative management and payroll within the OCP represent:

- 31% for the automation of tasks and exchanges: increase in the reactivity of intermediaries in the treatment of actions (training plan, management of leave, expense, reservations of rooms…).
- 29% for the provision of individual information centralized in a single base toward the management of proximity and the collaborators themselves.
- 16% for the control of the activity (the provision of consistent data for monitoring the HR activity and allows a visibility on the trends and therefore allows a better reactivity of responsible to respond to stimuli).
- 15% for the opening of the functionalities of the tools to the individual follow-up of the Collaborators and their learning (developments of individualized services to different users (employees, managers, HRD, candidates, leaders): notion of "self-service" and access to the tools of self-training.
- 9% see that there "has other contribution of the system on the gap.

Source: Survey conducted by ourselves
61% of persons interviewed stated that they are not able to carry out their work without the use of the system (obligation or need) against 39% who see the reverse.

Figure n°7: The HRIS and the needs of the service

90% of employees interviewed stated that the HRIS responds to their needs.

Figure n°8: The HRIS and the expectations of associates

68% of employees of the service administrative management and payroll are satisfied entirely on the exploitation of the system, 26% responds by this dependent6% believe that this last is not responding to their need.

The results indicate that the HRIS of the OCP-Khouribga does not cover the whole of the processes for the HR management. The results of the study confirms that the HRIS Key Priority The activity related to the remuneration and that relating to the administration of the staff. The training and evaluation are very little concerned. Knowing that this new system represents for the company a very significant investment.
The inadequacy of the profiles with the posts occupied which fact the agents affected in services or they can give their best, and consequently their skills not exploited in an appropriate manner. According to some contributors OCP, the payroll is the brick indispensable in the process of the HRM. To this effect, it is enough to have a system that responds to this feature to be effective.

The system is an asset to optimize the HR function; however, we note that some employees prefer to work without the system. A very large percentage of the Staff says that they need a training, which explained by the non-mastery of the system.

All those who use an HRIS underline that it allows a better control of time limits compared to the production of reports and that it accelerates the administrative process. For most respondents, the HRIS fosters a climate of sharing (concerning the information). Therefore, there is a decentralization of the clerical work toward the framework of proximity.

The respondents argue that they have been involved in the project implementation of the HRIS and that human resources represented to ensure the transfer of knowledge. In addition, there has been in the training side HRIS an important effort of awareness on the part of responsible HR of the OCP.

The HRIS allows a reduction in administrative tasks at low benefit of HR managers. This phenomenon explained according to the study by the dematerialization of HRM for the framing of proximity.

In the light of these results, it inferred for half of the respondents that such an increase of the autonomy and responsibilities of employees associated with a shared information means that the information transmitted less and less: thanks to the HRIS, the information consulted. By the other half, a new form of exclusion the inside of the exclusion to the inside of the company seems real between those who have developed a computer culture and those who do this has not of this culture.

For the whole of the respondents, the system should deal with the same number of volume with the same number of staff (the OCP reflects the image of the corporate citizenship). The HRIS makes an information that is clear, colorless and standardized which facilitated the management of records and decreases the time limit for the transmission of the information. In addition, the HRIS accelerates decision-making taking into account of the possibility of having an information that updated, and the fact of a decrease of intermediaries.

We infer that the HRIS system adopted by the OCP (the area of Khouribga) was able to respond more or less to certain expectations and objectives of the whole of the staff and of the top managements, (for example the pays, and the administrative management of the staff). However, the functionality of the value added in the HR department not optimized.

V. Discussion

Our investigation, has allowed us to see the influence of the HRIS system on the HR function and the degree of satisfaction of employees toward this system. In a first phase, we propose; set the HRIS to:

- Meet the expectations of the staff, to the constraints of the Human Resources Branch and the strategic objectives of the Tops managements.
- Ensure the adequacy between the cost of the system, the means devoted…. and the results obtained. In other words, a system such that the oracle, gestor must generate a relationship of effectiveness between cost-result.

Subsequently, the company may proceed to the establishment of a training plan taking into account.

- The identification of the needs of the actors of the HRIS system, to put the emphasis on skills to develop. In other words, it must diagnose the current situation, and projecting oneself in a desired situation.

- The easiest and least costly technique to detect the axes of improvement of each collaborator are the observation and listening (observing the employees and listening to their comment) in the face of the methods of work, this way enables the IT manager to have a global view of the situation and know aspects to improve.

- For the design of the training we offer, to resort to an external consultant to develop the specific content of the training, in collaboration with the human resources officials of the company which already having the culture of the company and a knowledge of the parfond staff.

The dissemination of the training requires a proper choice of teaching techniques with the target population.

The HRIS are going to have to learn new things, new ways to make, and a new management, which is not accepted by all. This is not the case for the new generations, called the "digital natives" since they are born in this environment. They therefore have no difficulty in the face of this general computerization. The Human Resources Service is going to have to manage these two personalities within the company, giving training for certain, and using the knowledge on the computer of the other.
VI. Conclusion

The technologies of the information have a potential impact on the strategy, the structure, and the functioning of the company. These technologies must be controlled and used properly to have the success; in this fact, the Human resources will have an important role within the HRIS.

All along of the article we studied empirically the validity of the theoretical assumptions through a project aimed the optimization of HRM within the OCP as well as the strengths of the HRIS.

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[6] Information note, bond Emission OCP ITS, she was referred by the CDVM on 09 September 2012 under the reference N° VI/EM/028/2011.
[7] Information Note: OCP-its, bond Emission OCP ITS, she was referred by the CDVM on 09 September 2011 under the reference N° VI/EM/028/2011.