



REENGINEERING OF HUMAN RESOURCE MANAGEMENT PROCESS FOR CONTROL OF STAFF AND THE WAGE BILL IN CAMEROON

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Abstract: Over a number of years, Cameroon has undertaken a number of actions aiming at controlling the wage bill of the civil service. Despite all these efforts and enormous budgets, the country is not always able to achieve this goal. The control of the wage bill and the number of civil servants has become a well-worn subject. Actions that have been undertaken range from the physical census of public officials to computerization operations. This gave rise to the implementation of two software systems, ANTILOPE for the payroll management and SIGIPES for the career profiles processing of public officials. However, many questions still remain in Cameroonians' minds (1) What is problematic in this management? (2) What is the best way to manage the public expenditure? This work presents a new procedure of staff control management of the Cameroonian civil service. This procedure results from the reengineering of the existing administrative procedures in order to allow each participant of the payroll processing chain to fully play its role for a proximity management, thus guaranteeing the payroll control through the control of staff and skills. In addition, we can aggregate the improvement of the quality of service in the administration and the prospective management of skills and workstations in line with the evolution of the environment. The new state human resources management procedure takes into account the division of administrative work and the role of each administration in the management and control of the state's HR management.

Keywords: Reengineering, administrative procedure, wage bill, public official's staff, public administration, public service, administrative reform, QoS

I. INTRODUCTION

The sharp economic downturn experienced by Cameroon since the second half of the 1980s with the collapse of commodity prices, the deterioration of trade terms of, the deep budget deficit and the decline in economic activity led the public authorities to define a new mode of governance centered on the redefinition of the role of the State, the rationalization of public finances and the recovery of economic growth [3, 5, 6].

In this logic, the government has implemented an internal adjustment policy focused on reducing the lifestyle of the state and the weight of the public sector in the economy. This first generation of reforms proved insufficient to eradicate cash flow tensions. With the International Monetary Fund (FMI), the government signs the implementation agreements of the Structural Adjustment Program (SAP), whose reform component of the civil service focused on reducing the cost of administration. This reduction was expressed in terms of reducing the size of the administration [3, 4].

To this end, the measures with immediate budgetary impact have been taken, in particular the reduction of the wage bill and the reduction of the number of staffs with recruitment freeze in the public service, the systematic retirement of staff who have reached the age of retirement

and later, the dismissal of staff under the "Social Plan of the Public Service" [10].

Recognizing that it would be difficult for the administration to implement economic stimulus measures after its various weight loss programs, the government has adopted a new generation of reforms as part of the national program of governance and the fight against poverty against corruption in 2000 [2, 9]. These changes are aimed at modernizing the functioning of its administrative machinery. It involves introducing changes in the principles of management of public affairs through an approach that consists of identifying the amplifying levers that can reduce resistance, adapt the administration to its environment, anticipate perceived changes, optimize public interventions, better take into account the needs of public service users in order to improve the quality of service provided to them.

With regard to the human resource, the mixed results obtained by applying the cyclical measures adopted in the Structural Adjustment Plans have led the government to refocus its policy on the main resource that is the human resource with the implementation the deconcentration project of the management of such resources [2, 9]. This would involve changing the management paradigms of the state staff by introducing a real approach to human resources management that integrates a perfect synergy of personnel administration, human resource development and workforce planning management, guarantee of the control of the

workforce and the wage bill of State agents. Since then, a certain number of actions have been taken by the State [2], including:

- The automation of the treatment of public servants' careers in 2000;
- Launch in 2014 of a project that was to be implemented in 24 months for the control of the payroll and its corollary which masters the workforce. This project after more than 24 months did not produce any results. It consisted in adapting the ERP SAP to the Cameroonian context in terms of human resources management as it is decreed by the procedures in the matter knowing that the initial ERP is theoretically, functionally
- Automation of salary processing in 1986;
- Transfers to banks of salaries and pensions from CFAF 100,000;
- The multiple physical censuses of public officials, the latest being the one launched in April 2018 on the physical counting of public officials, the first report made public reports more than 25,000 agents who would be sought in the Cameroonian civil service [1];
- Multiple physical censuses of retirees;
- Multiple checks of pay at MINFI before payment of wages;
- The automation of the changeover of the management position of public agents from assets to retirement with immediate effect on the payment of the retirement pension.
- and contextually at the antipodes of the Cameroonian situation. This ninth state action led to an expenditure of over 14 billion CFA francs.

All these actions brought each of the solutions, most of which remained fixed in time apart from the treatment of the acts of career which seems to be acquired despite the limits observed here and there. Despite all these efforts and large budgets granted by the State to curb this difficulty, the control of the workforce and the wage bill of the State remains an entire problem for which an efficient and effective solution must be found for a clean Cameroon and emerge in 2035.

Notwithstanding these various actions, the Cameroonian civil service faced with the persistence of the difficulties related to the control of the payroll and its corollary which is the mastery of the workforce, this part of the Cameroonian public administration does not ensure a sustainable development, a competitive administration, is out of step with the state strategy on the civil service. There is thus a real need to evaluate the procedures put in place until now in the management of the State's human resources in connection with the general strategy of the State and its organization.

This paper addresses the problem of the control of the payroll and the mastery of the workforce in the Cameroonian public service. The rest of the paper is organized as follows: section 2 presents the organization of administrative control of labor; Section 3 gives an analysis of a misuse of IT in the Cameroonian Public Administration; Section 4 relates to the limitation of current procedures; section 5 presents the new procedure of staff control management of the Cameroonian civil service and section 6 concludes and gives some perspectives.

II. ORGANIZATION OF ADMINISTRATIVE CONTROL LABOR

The State in its organization has set up structures in charge of controlling its activities. Among its structures, there is the ministry delegated to the presidency in charge of the Superior Control of the State (CONSUPE) [7]. This structure is under the direct authority of the President of the Republic, from whom she receives the instructions and to whom she reports. Its mission is among other things the audit of public services, the control of the execution of the State budget, the technical, methodological and pedagogical support for the control and audit of the management of public wealth, the administrative control and internal audit structures of other ministerial departments and public and Para public institutions, the dissemination of auditing and auditing standards in the public and Para public sector, government assistance in the design, the implementation and evaluation of state modernization programs. In its operation, the CONSUPE has a computer unit which is a support service for the implementation of control activities.

In view of the attributions, this structure had to put in place effective mechanisms for better control of the wage bill, which is an integral part of the State budget. This activity is still awaited and the State continues to squeeze out the expenses of staff who have no connection with the actual situation of the workforce and their quality in the various administrations. The new management of public affairs [11, 12] recommends the development of a process called "5R" for a better quality of service both internally and externally. The 5R process is composed of the following activities: (1) reengineering of management processes, realignment with respect to management strategy, restructuring, reinvention, and reconceptualization. It will also be in this work to see if this process was implemented in Cameroon in the management of human resources and if yes its level of implementation, the results already garnered and to see the feasibility of the remaining activities if necessary.

III. MISUSE OF IT

The first mistake was to think that computer science would come from a magic trick to solve this problem. Let us remind you that computer science through automation highlights working methods. If the methods are good, the computerization will amplify them. In contrast, if the methods are bad, computerization will also amplify all that is bad [11]. Today, we are not surprised to observe that control over the workforce and the wage bill remains an entire problem. We are not surprised that men are getting richer on the cover of payroll processing. We are not surprised to observe the existence of fictitious staff. We are not surprised to observe that the dead continue to emerge in the pay chain. We are not surprised to observe that many public officials have saw-tooth wages. We are not surprised that many public officials perceive benefits unrelated to their workstation and their bodies.

IV. LIMITATION OF CURRENT PROCEDURES

Before All these observations lead us to ask the question about the procedures used to manage the human resources of the state. The problem is at this level. As we said earlier, if we use the right procedures then, even without computers, we will master the workforce and the payroll. The only problem we will have will be the constraints related to

manual treatments so that each month public officials each have their salary and / or pension. It is to save time, to deal with the constraints of duration of treatment that we automate.

Let us understand very well, we automate in a sector where the procedures are clearly identified, mastered, validated and produce the expected and projected good results. Identification, mastery and validation refer to the definition of the different activities associated with each procedure, the definition of the actors to be involved in the implementation of each activity, the definition of the different constraints related to each implementation. In Cameroon, if the manuals of procedures seem to exist, they are not mastered even less respected. These limits make one think of the organization of work and the non-adaptation of procedures to the Cameroonian context. What's good for Jean is not good for Paul. We must have procedures that are well adapted to our context.

A. Organizational problem

In the Cameroonian context, each public official is assigned to a job in a well-defined structure [9, 10]. Each structure has an appointed head. The first question is, does every leader know who works under his authority? To say yes would mean that he knows the number of public officials who work there, he knows their bodies and ranks, he knows the benefits of these bodies and ranks, he knows his family load in terms of the number of children in charge. So, very curiously, from 2007 to 2015, we conducted a study in public service structures to collect data according to these parameters [11]. We visited over 1000 structures (offices, services, sub-directorates and directorates) in all ministries. From the analysis of the data collected, we observed that less than 1% of the services identified know the agents who work there. An extrapolation at the departmental level pointed out to that no department really knows the public servants who work there [11]. How do we want to control the workforce and payroll if the data is wrong from the ground up? The control of these attributes at the level of the structures is the guarantee of the control of the workforce and the wage bill of the State. Everything must be played out at the level of structures with the responsibility of their respective leaders. The resulting dynamics will lead Cameroon to master the workforce and the wage bill. Any other approach seems doomed to fail as evidenced by the various actions mentioned above.

B. Structural problem

The management of the state's human resources is essentially the responsibility of two ministries [9, 10]: the Ministry of Civil Service and Administrative Reform and the Ministry of Finance. While the Ministry of Public Service and Administrative Reforms (MINFOPRA) deals mainly with the management of the careers of public officials, MINFI deals with payroll. Apart from payroll, it is the Ministry of Finance (MINFI) that calculates the balance to be paid to each public official at the end of each month. This pay is done without a formal validation of the user structure of the public agent. Moreover, we understand it very well since the structures themselves do not control their numbers. This organization, it seems to us, presents serious dysfunctions as is observed today. Public officials cannot be

paid for by the structures that employ them. We believe, at the risk of being mistaken, that MINFI must pay salaries based on data received from user administrations. Everything must be done like other state expenditures. The commitments are made in the administrations and the MINFI pays; it should be also the case for the payment of the salaries of the public agents.

V. PROPOSAL

Of the thorny problem related to the control of the wage bill of the State, we have the honor to submit the measures to be taken strategic and operational in order to put an end to this disease that plagues the Cameroonian civil service.

A. Strategic level

- The establishment of a structure responsible for the salary treatment of public officials would be attached to the presidency of the republic. She must not be at MINFOPRA even less at MINFI or CONSUPE because she must not be judge and party. Its role will be to receive each month the salary commitments of the administrations, consolidate them and then issue payment orders to MINFI. The role of MINFI is thus limited to payment only.
- The establishment in this structure of a management of retirees and pensioners to deal only with retirees and pensioners.
- The dissolution of the Personnel and Pension Expenditure Department at MINFI.
- The restructuring of the National Centre for Computer Development's (CENADI) missions to become a real computing and data storage center of the State. CENADI should thus be a direction of the aforementioned structure

B. Operational level

At the operational level, we are proposing a new secure procedure for salary processing. The new vision is divided into three sub-procedures namely:

- Data collection and validation of public officials,
- Pay processing,
- The control of the pay.

It should be noted that a pay campaign should now involve four entities: the user administration having the role of collecting and validating the data of its staff, CENADI for the consolidated calculation of the pay from the data sent by the administrations, the MINFI for the payment of wages from the consolidated slips with the administrations, and the CONSUPE for the control of wages paid for detection of possible incongruities.

1) *Procedure for Data collection and validation of public officials:* Each administration has a structure in charge of the management of human resources and a structure in charge of the treatment and the validation balance and treasure of the acts that are treated there. The structure in charge of human resources management has the role of aggregating the consolidated data in each of the structures of the administration as defined in the organization chart. Indeed, the collection of data for a pay campaign is done in each structure of the administration according to the organization chart. As such, each head of

office collects the data of the support executives attached to him, the heads of departments collect the data of the heads of offices and managers who are directly attached to him, the Deputy Directors do the same, as well as immediately to the top of the structure. We recall that, generically, an administration / ministry is made up of two major services, namely the central services and the decentralized services, all of which are attached to the departmental department head. In the deconcentrated services, there are the regional delegates who are at the level of the chief places of the regions, the departmental delegates at the level of the chief places of the departments and are attached to the regional delegates, district delegates at the level of the chief places of the district and have as departmental superiors the departmental delegates. In the central services, we have the structures directly attached to the minister's office, the general secretariat, the directorates, the sub-divisions, the services and the offices.

Each structure thus defined has the role of collecting and validating the data of its collaborators and

- Each organization collects and validates the data of its immediate collaborators and directly transmits its file to the structure in charge of human resources management for aggregation. The structure in charge of HRM will therefore aggregate all these files for transmission to CENADI.

Figure 1 shows the graphical representation of this process using BPMN 2.0 notation

2) *Balance processing procedure*

Balance processing is done at CENADI. This processing consists, for each file coming from an administration, to make simulations on the payroll relative to this administration. Once these simulations are done, the calculation slips are sent to the administrations and more specifically to the structure in charge of salary processing (balance and treasure validation). Subsequently, each administration structure receives payroll slips from its staff for validation. If there are any errors found at this level, CENADI is contacted for correction and returns the file once the errors have been corrected. If there are no errors, the files are returned to the payroll processing structure (balance and treasure validation) for consolidation. Once slips are consolidated, they are sent to MINFI for payment of wages. Figure 2 shows the graphical representation of this process using BPMN 2.0 notation.

sending them to its immediate superior. That is to say that the public officer of rank n collects and validates the data of his collaborators of rank n-1. For the collection and validation operation to be effective, two options are recommended:

- Collection and validation operations start at the lowest hierarchical level. For example, at the office level and gradually, the information goes up to the highest hierarchical level. That is to say that a structure of rank n expects the data of the structure or structures of rank n-1, validates them and completes them for transmission to the structure of level n+1 for validation and following the collection. For this case, we will have a single file at the end of the collection operation that will be sent to the HR management structure for transmission to CENADI.

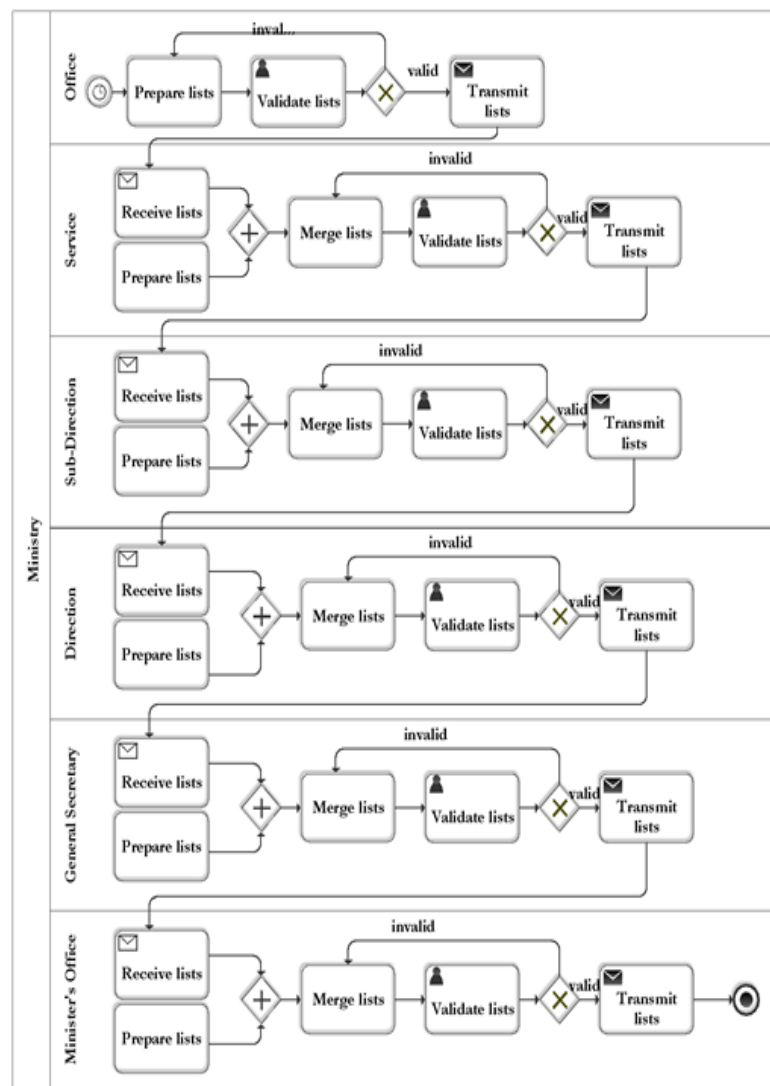


Figure 1. Procedure for data collection and validation in administrations

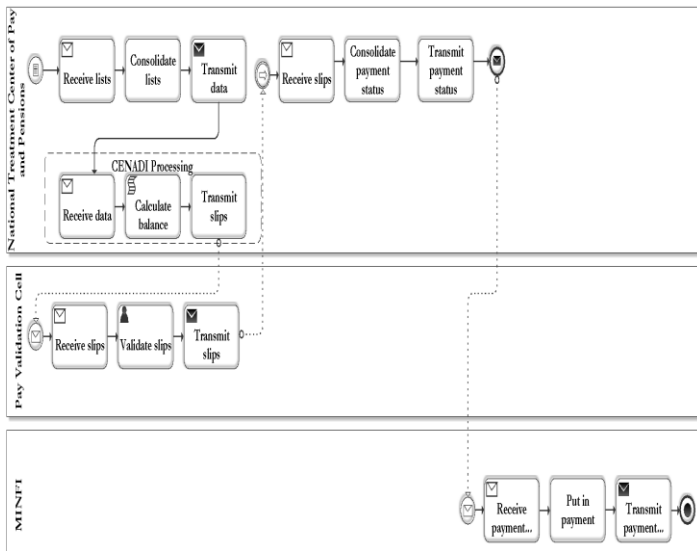


Figure 2. Balance Processing Procedure

3) *Procedue to control a pay campaigning*

Pay control is done at CONSUPE. The purpose here is to reassure oneself that all elements have been taken into account in the payment of wages. In fact, if all the actors in the pay processing chain have verified the salary information of the state agents, the CONSUPE should not detect anything as an error. It is therefore a question here of verifying that the elements of remuneration are those relating to the agents who have been paid. He must identify any cases of payment of undue benefits, the payment of fictitious agents and cases of unpaid reminders.

For this purpose, in month n, each administration must send to the CONSUPE the exhaustive file of its personnel relating to the balance campaign of month n-1. File which highlights all the elements of remunerations of the public agents belonging to this administration. The MINFI also needs to send to the CONSUPE the complete file (by administration) of the balance campaign for month n-1. The CONSUPE simply has to cross these files to validate the salary processing of month n-1. If inconsistencies and false verifications are found at the end of this audit, the CONSUPE has the possibility to open investigations with all suspected actors. In case of inconsistency observed in these files, the concerned administrations are seized to correct these inconsistencies and to issue to the interested parties, on behalf of the campaign balance of the month n, recipe orders in the case of a too much collected or reminders (or regularizations) in the case of an omission of payment of an agent. Figure 3 shows the graphical representation of this process using BPMN 2.0 notation:

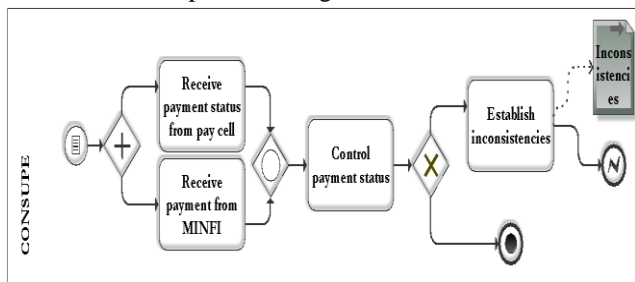


Figure 3. Procedure of pay campaign control

4) *Constraints to take into account*

Data reporting or data flow can take a long time. It is therefore recommended that each organization take it early so that wages are paid on time. To start this secure salary payment procedure, at launch, we see the salaries of the N-1 month paid at Month N, and so on. Over time, we will not feel this difference because the procedure will already be well understood. Thus, in month N, the salary of month N-1 is paid. If we are in January, we pay the December wage, the January wage is paid in February. The advantage of this secure salary payment procedure is that it makes each Head of Structure accountable in the management of human resources. This will be a participative management of human resources. This responsibility incurs criminally the responsible (s) recognized (s) negligence that would (would) pay the salary to an agent not working in the structure.

5) *Integration of biometrics*

Integrate biometrics into the control of actual attendance at different administrative workstations. This will require the acquisition by each structure according to its dismemberments, biometric terminals each with a mobile component (3G) which will reflect the biometric data enrolled in the central database. Only public officials who have made biometric enrollments will be allowed to receive their salary if they are at the same time identified in the user structure. This presupposes that the current SIGIPES and ANTILOPE applications should be merged to take into account the biometric data and thus allow the Cameroonian public administration to have a single source of data of the State personnel. Figure 4 and 5 shows respectively the graphical representation of the deployment procedure for biometrics and payroll procedure with biometrics using BPMN 2.0 notation.

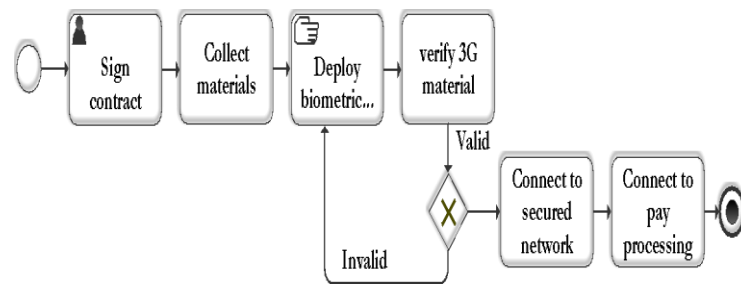


Figure 4. Deployment procedure for biometric

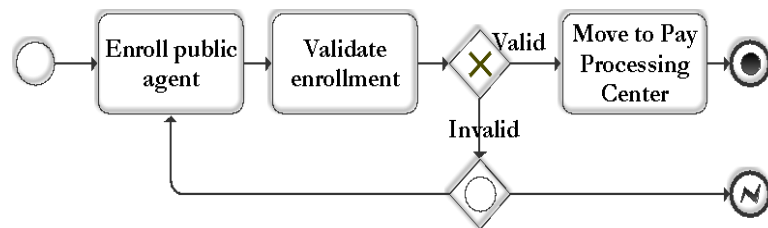


Figure 5. Payroll procedure with biometrics

VI. **ADVANTAGES OF THE PROPOSED SOLUTION**

Overall, the new orientation will allow the State to solve the thorny problem of controlling the workforce and the wage bill. This, specifically, can be perceived on five levels namely: legal, managerial, administrative, social and economic.

A. *At the legal level*

The new vision will allow the State to better implement or even better monitor the implementation of Decree No. 2012/079 of 09 March 2012 on the deconcentration of the management of State personnel and pay. This measure stipulates that the user department of the public official is also the one who manages his career and also pays his salary.

B. *At the managerial level*

The proposed procedure will contribute to:

- have a file of permanently cleaned up state staff: after each pay campaign, the State will have a file giving the real situation of its human resources in terms of career and assignment.
- have a transversal and integral reading of the mobility of human resources of the State: From the aggregated file and validated by the CONSUPE of month n, we will have a visibility of the mobilities observed in month n-1.
- ensure the forward management of public expenditure: The file being cleaned up, the State could make simulations in the short, medium and long term with a margin of error relatively low.
- value the human resource: Given that each head of structure validates the data of its employees for the treatment of their balance, the links between staff will be more welded and the concept of collaboration will make sense.

C. *At the administrative level*

The proximity management that underlies this new vision will make it possible to get out of the traditional conception of slowness and administrative inertia by the speed with which pay is processed. Also, roles in managing a payout campaign are better distributed.

D. *At the social level*

The new procedure will make it possible to fight against corruption since the immediate superior must be able to validate the sales data of his employees. This reduces the multiple interventions observed in the monitoring of validations of the financial effects of the acts of the State staff.

E. *At the economic level*

From the economic point of view, by allowing the manager of the career to pay the salaries of public employees, the new procedure contributes to:

- be able to make a provisional budgetary management in a rational way;
- verifying objectively the internal debt of the State over time;
- master the expense item that is the management of human resources in the public expenditure chain;
- effectively control the allocation of allowances, bonuses and other rights granted according to the different specific statuses and workstations of staff.

VII. URBANIZATION OF CURRENT COMPUTER SYSTEMS

The urbanization of the state information system in accordance with this secure procedure for the payment of wages is an absolute necessity. The Cameroonian University could be used to support the State in the implementation of software tools at lower cost. I am thinking of the University of Yaounde I, which has a computer science department and whose winners have contributed to the ownership and stabilization of SIGIPES, which is currently working in the administrations in its management of career acts of public agents.

VIII. CONCLUSION

In this paper, we presented a new procedure of staff control management of the Cameroonian civil service. This procedure results from the reengineering of the existing administrative procedures in order to allow each participant of the payroll processing chain to fully play its role for a proximity management, thus guaranteeing the payroll control through the control of staff and skills. To tackle this issue, the paper has first presented the problem faced by Cameroon public administration which is the persistence of the difficulties related to the control of the payroll and its corollary which is the mastery of the workforce. We realized that despite all the efforts and large budgets granted by the State to curb this difficulty, the control of the workforce and the wage bill of the State remains an entire problem for which an efficient and effective solution must be found for a clean Cameroon and emerge in 2035.

In the second part of this work, we presented the ministry delegated to the presidency in charge of the Superior Control of the State which mission is among other things the audit of public services, the control of the execution of the State budget, the technical, methodological and pedagogical support for the control and audit of the management of public wealth, the administrative control and internal audit structures of other ministerial departments and public and Para public institutions, the dissemination of auditing and auditing standards in the public and Para public sector, government assistance in the design, the implementation and evaluation of state modernization programs. We also present in this section the misuse of IT and the limitations of current procedure.

The next step of this write-up has consisted to the definition of the new state human resources management procedure. At the operational level, the proposed procedure is subdivided into three sub-procedures namely the data collection and validation of public officials, the pay processing and the control of the pay. At the strategic level, we purpose the establishment of a structure responsible for the salary treatment of public officials which would be attached to the presidency of the republic; the establishment in this structure of a management of retirees and pensioners to deal only with retirees and pensioners; the dissolution of the Personnel and Pension Expenditure Department at MINFI and the restructuring of CENADI's missions to become a real computing and data storage center of the State.

The problem solved here is encountered in most developing countries. We firmly believe that the proposed procedure can be used in those countries to better address the control of the workforce and the wage bill of the State problem because the new state human resources management procedure

takes into account the division of administrative work and the role of each administration in the management and control of the state's HR management. This procedure can aggregate the improvement of the quality of service in the administration and the prospective management of skills and workstations in line with the evolution of the environment.

However, we did not address in this paper the issue of automation of the proposed procedure. The next step should be to automate the new procedure in order to improved quality of service and to better anticipate the management of human resources of the state.

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X. REFERENCES

- [1] BRM 2018, « Gestion publique », Investir au Cameroun, <https://www.investiraucameroun.com/gestion-publique/2310-11595-plus-de-25-000-fonctionnaires-et-agents-de-l-etat-camerounais-en-sursis-apres-l-operation-de-comptage-physique>
- [2] Brunel Sylvie. Les difficultés du Cameroun : fin d'un modèle ou crise de croissance ?. In: L'information géographique, volume 67, n°1, 2003. pp. 134-142
- [3] Jean Ngandjeu, Le Cameroun et la Crise, l'Harmattan, 1988
- [4] The private sector in the economy of Cameroon, SIFIDA(SFI), 1985
- [5] Dossiers du cabinet de conseil Nord-Sud-Export Consultants, Ministère de la Coopération, Industrialisation des pays d'Afrique Sub-saharienne : le cas du Cameroun, SEDES, 1986
- [6] Dossiers du poste d'expansion économique à Yaoundé et de la mission de réhabilitation des entreprises publiques (PNUD, Banque Mondiale). Joseph Ntangsi, The political and economic dimensions of agricultural policy in Cameroon, 1987
- [7] Décret N° c2013/287 du 04 septembre 2013 portant organisation des services du Contrôle supérieur de l'Etat
- [8] Cheka, Cosmas. "Traditional Authority at the Crossroads of Governance in Republican Cameroon." Africa Development. Vol XXXIII, No. 2, 2008, pp. 67-89.
- [9] Government of Cameroon. 2010. «Strategy Document for Growth and Employment (DSCE).»
- [10] N'Cho-Oguie, Charles & Florence Charlier. Sustaining Reforms for Inclusive Growth in Cameroon: a Development Policy Review. Washington, DC: The World Bank, 2009.
- [11] Atsa Etoundi Roger and Abessolo Alo'o Ghislain: Quality of service improvement based on procedure analysis and reengineering: a case study in Cameroonian public service, Int. J. Electronic Governance, Vol. 9, Nos. 1/2, 201
- [12] Cheka, Cosmas. "The State of the Process of Decentralization." Africa Development. Vol XXXII, No. 2, 2012. pp 181-196.