USING DIGITAL TOOLS IN THE MANAGEMENT OF CIVIL SERVANTS. CASE STUDY ON THE NATIONAL AGENCY OF CIVIL SERVANTS REFORMS INCLUDED IN THE NATIONAL RECOVERY AND RESILIENCE PLAN

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ABSTRACT

The digitalization of administrative practices is a major topic at the heart of contemporary theoretical and practical debates. All the actions undertaken in this respect can be carried out with maximum effectiveness if the very management of human resources (HRM) in public administration is ensured through digital tools. Such an approach would contribute to changing the current paradigm in which human resources departments predominantly pursue legislative compliance, with a new strategic approach. The topicality of the subject in the Romanian context is all the more evident, given some systemic problems reported by both national and European institutions, such as the fragmented use of IT systems, over-bureaucratic workflows or limited interoperability. Given its mandate, the National Agency of Civil Servants (NACS) has a leading role in the reform of civil service management. Through the use of the National Recovery and Resilience Plan (NRRP) funding, NACS will implement a series of measures, which will ensure the HRM reform and will accelerate the digital transformation. Among them, our study will cover the development of the civil servants management platform E-ANFP, the development of SIMRU (Integrated Human Resources Management System) and the operationalization of the national civil servant recruitment competition. This paper draws on qualitative research tools to identify the main barriers to the digital transformation of HRM in the Romanian public sector and to analyse some of the NACS reforms foreseen in the NRRP. Finally, the insights of this research can contribute to accelerating digital transformation in the Romanian public sector.

KEYWORDS: Civil service, digitalization, human resource, reform.

1. INTRODUCTION

Theorists and practitioners in administrative, social, management and other related fields have constantly tried to provide solutions for improving the quality of public administration.

In Romania, this has taken the form of various studies analysing different aspects of the functioning of public institutions, but an emerging trend is to examine the state of human resource management (from recruitment to departure).

Given the fast evolution of technology, the introduction and consolidation of the latest and most innovative digital tools in public administration, personnel management has become a necessity. In the current context, one can speak of a "smart" administration when digital solutions are constantly embraced and upgraded for future-proofing purposes.

In Romania, there are few public institutions that use the latest innovative solution to fulfil their institutional mandate. Among the exceptions in this regard is the National Agency of Civil Servants (NACS), which in order to ensure the management of civil servants, has initiated a series of reforms that contribute to the digital transformation and could lead Romanian public administration into the

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21st century. However, this may prove to be a massive challenge, given some of the systematic shortcomings Romania faces in this area, such as the fragmented use of IT systems, over-bureaucratic workflows, limited interoperability, poor Digital Economy and Society Index (DESI) performance, and so on.

This paper has two general objectives. The first one is to identify the main barriers to the digital transformation of Human Resources Management (HRM) in the Romanian public sector, and the second one is to consolidate the general knowledge about NACS' actions towards the HRM reform. In order to achieve these objectives, the paper draws upon qualitative research in the form of a case study exploring three innovative measures of NACS.

The main research tool employed will be documentary observation. The use of this tool leads to a comprehensive understanding of human resource management in the Romanian public administration, based on data extracted from specialized literature, professional contributions and relevant legislation.

Based on the documentary observation, we can develop an analytical framework composed of six layers: (I) the state of play on digital Human Resource Management, (II) the HRM in Romania and the barriers to the digital transformation, (III) the role and mandate of NACS, (IV) E-ANFP, (V) SIMRU, (VI) the operationalization of the civil servants' national recruitment competition. Therefore, the paper will explore these dimensions in a linear way.

2.1. The state of play on digital Human Resource Management (HRM)

The digitalization of Human Resource Management (HRM) is a growing global trend, both in the corporate world and in the public sector, although one could argue the former has recorded greater progress than the latter. After the mid-2010s, the private sector has made significant progress in reinforcing this trend. Thus, many private organisations are already using digital solutions in all processes and sub-processes specific to HRM, from hiring, payroll and other monetary and non-monetary incentives to performance management, learning and career development (Verma & Rana, 2021).

Prior to the theoretical proceedings necessary to understand the state of play on digital transformation in HRM, it is necessary to clarify some often-confused concepts, namely the digitisation and the digitalization of HRM. In order to overcome this conceptual overlap, Strohmeier (2020) suggested that HRM digitization implies the conversion of classical HR information into digital form, through a technical process, while HRM digitalization implies harnessing the benefits of digitization for operational and strategic HRM goals, through a socio-technical process. Thus, a veritable digital transformation must unite both digitisation and digitalization.

At the core of the digital transformation of HRM lies the integration of Artificial Intelligence (AI) and Robotic Process Automation (RPA) platforms in both strategic and day-to-day HRM operations. In order to optimize human resource management, many organizations are using AI to plan training programs, online courses, digital classes, and so on; and RPA to perform administrative operations specific to hiring, communication, reporting or data uploading (Verma & Rana, 2021). Given its many functionalities, the European Union (EU) advocates the use of RPA in public administration, especially within HRM processes (Misuraca et al., 2020).

An increasingly popular digital tool in HRM concerns self-service platforms, with some experts advocating for its widespread (Bondarouk & Ruël, 2009). The functionalities of these platforms streamline the work of the organisation both from the perspective of the employee, who no longer has to go through a bureaucratic procedure to obtain various administrative documents, and from the perspective of HR department/management, which are also relieved of some rudimentary operations and therefore have more time to perform their specific tasks.

Another key element of the digitalization process revolves around the concept of HR analytics, referring to the collection and analysis of big data and evidence decision-making. Yet, the consolidation of HR analytics is facing a series of both human and technical challenges, such as poor

data quality, lacking skills in analytics, misconceptions related to big data, compliance-oriented HR processes and scepticism (Dahlbom et al., 2019).

The fast advancement of new technology means that some digital solutions once seen as innovative are outdated and must be replaced by newer, better ones. In this respect, Deloitte (Occean et al., 2017) drew attention, for example, to the fact that although cloud-based HR systems have delivered great value, the current landscape makes them no longer sufficient, but merely a starting point for the consolidation of platforms that incorporate as many functionalities as possible. Therefore, in order to operate at the highest levels of efficiency and effectiveness, organisations must keep pace with the fast development of technology.

On a different note, researchers have shown interest towards exploring the benefits of a human resource management approach based on the integration of digital systems. These included reducing the time spent on routine operations, enabling HR departments to focus on more complex assignments by eliminating the necessity of human input in recurring tasks through automation, and ultimately, reducing the costs associated with basic tasks (Strohmeier, 2020; Verma & Rana, 2021).

Looking beyond the advantages of digital transformation, some experts have pointed out that embedding digital systems in the organisation's workflow processes will also lead to a change in the organisational culture, especially on aspects such as job design, recruitment process, training, competency framework and so on (Cantoni & Mangia, 2018). In the public sector context, this shift could be seen as an advantage, given the need for a new paradigm that address some shortcomings related to the recruitment processes and career management of civil servants or linking organisational needs with recruitment planning.

Analysing HRM reforms in Europe, Leisink and Knies (2018) concluded that the ideas attributed to the New Public Management (NPM) concept are still reflected in the management of civil servants. In the public sector, HRM meant paying special attention to the idea of performance. (Boyne et al. 1999, in Leisink & Knies, 2018) and the main purpose of digital tools is to maximize performance. The benefits of such an approach extend not only to the direct beneficiaries (i.e., civil servants), but also to the final stakeholders, such as citizens and the society (Leisink & Knies, 2018). Thereby, the NPM model could facilitate digital transformation, by increasing the likelihood of using modern digital tools in the management of civil servants, following the private sector model.

Lastly, we should note that some European administrations are already using advanced digital instruments in the management of civil servants. This is the case of Netherlands, where public sector personnel management relies, in addition to traditional tools and practices, on digital self-service platforms in order to eliminate bureaucracy and automate some routine operations (World Bank, 2020a). In addition, other EU states, such as Lithuania, are well-known for the quality of data collection and sharing process, by extending the use of digital tools even to periodic performance reviews (World Bank, 2020a).

In a brief overview, the digitalization of HRM is a topic of interest in both the private and public sectors, with the fast evolution of digital tools underpinning a new way of managing human resources.

2.2. HRM in Romania and the barriers to the digital transformation

According to the Administrative Code, the human resources management in the public sector is carried out within each public institution by a specialised department, which collaborates with the National Agency for Civil Servants (NACS) (GEO no. 57/2019). The same normative act also sets out some general elements typical for HRM - recruitment and performance review. In this respect, the Administrative Code establishes that as of 30 September 2023, the filling of a civil service state and territorial position shall be carried out through a two-stage competition, namely the recruitment stage, which consists of the verification of general knowledge and general competencies required in order to hold a civil service position, and the selection stage, which consists of the verification of specialised knowledge and specific competencies required to hold a vacant civil service position (GEO no. 57/2019). Until the entry into force of the two-stage competition, recruitment is limited to the selection stage. As regards the evaluation of civil servants' performance, this process is conducted

yearly, according to a standard model stipulated in the current legislation. The evaluation consists of an objective assessment of the performance of civil servants by comparing the extent to which individual objectives and performance criteria have been met with actual results (GEO no. 57/2019). Performance indicators shall be established to assess the extent to which the individual objectives of civil servants are achieved (GEO no. 57/2019). The performance appraisal is mandatory in the case of modification, suspension and ending of civil servants' employment (GEO no. 57/2019).

Another specific element of HRM, the career development of civil servants, is regulated by Government Decision no. 611/2008. According to this normative act, career management in the civil service is ensured by (I) NACS - by developing the legal framework, policies and instruments necessary for planning, organising and developing careers in the civil service, as well as monitoring and controlling their implementation; (II) each public institution - by developing internal policies and instruments for human resources management and planning; (III) the civil servant - by improving her professional performance and continuous development (GD no. 611/2008). At the basis of career management of civil servants are a number of principles, such as competence, competition, equal opportunities, professionalism, motivation and transparency (GD no. 611/2008).

In practice, human resource management tends to be rather operational/day-to-day than strategic. This is due both to the organisational culture in public institutions and to some systemic HRM challenges in the Romanian civil service. A first step in overcoming these challenges is to identify them. In this respect, NACS has identified a number of HRM challenges, as set out in Table 1, which also impacts the digital transformation process.

Table 1. HRM challenges in the Romanian civil service

	Table 1. HKM challenges in the Romanian civil service			
Item	Structural issue	Effects		
1.	Fragmentation of strategic human resources management in public administration	Doubles the process of making, implementing and monitoring human		
		resources policies Lack of a common vision and a uniform approach to human resources policy		
,	Current HRM lacks adequate tools and skills in today's technological context	Insufficient level of digitalization prevents strategic HRM Bureaucratic processes		
		Time consuming processes		
3.	Data on public administration employees is collected and managed in a fragmented way	Reporting differences Low quality of data available for decision making		
4.	Shortcomings in linking institutional needs with employee competencies, career and performance management	Lack of know-how Lack of low performance management Unattractive career option		
5.	Shortcomings in HR departments: technology gaps, overloaded personnel, excessive bureaucracy, competency gaps	No time for strategic work planning Too much time spent doing administrative tasks that could have been automated		
6.	Lack of awareness and prevention of corruption in public administration	Decreasing the prestige of the civil service		

Source: adapted from NACS (a., 2022), pp. 77-83

In addition to the challenges already identified by NACS, other stakeholders have also highlighted some shortcomings in the HRM processes, for instance: (I) high number of temporary appointments (without competition) to senior management and senior civil service positions; (II) the performance appraisal has a formal role; (III) the recruitment system is not competitive, nor sufficiently promoted; (IV) self-services are missing (World Bank, 2019. World Bank, 2020; World Bank, 2021). The value

of making HRM in the public sector more efficient through digital transformation is a premise validated also by the actions of the Romanian Government. In the National Recovery and Resilience Plan (NRRP), a number of challenges facing the public sector that may stand in the way of digital transformation have been outlined. Among these, the following were listed: the IT infrastructure of public institutions is technologically outdated, poorly interoperable and has a low level of cybersecurity; the lack of standardisation of key MRU data; the lack of modern data analysis methods; and the lack of self-service (Ministry of European Investments and Projects, 2021). Moreover, in the Digital Economy and Society Index (DESI), Romania ranks 27th on human capital, 15th on connectivity, 27th on digital technology integration and 27th on digital public services (European Commission, 2022). Romania's poor performance, with little to no yearly progress, is a barrier to the implementation of digital transformation of HRM.

All these challenges affect the quality of services provided by the public administration. Thus, the need for a long-term solution through a series of reforms is quite evident. Given the need for mitigation and recovery from the Sars-Cov-2 pandemic, the Recovery and Resilience Mechanism was created at EU level. Taking into account the EU priorities (green and digital transition), Member States can use this source of funding to implement structural reforms. In this context, NACS has already launched a series of actions to change the current paradigm of HRM in the public sector and to accelerate the digital transformation, as presented hereafter.

2.3. The National Agency of Civil Servants. Role and mandate

The National Agency of Civil Servants is a specialized body of the central public administration, organized and operating under the Ministry of Development, Public Works and Administration, having legal personality (GD no. 785/2022). NACS' mission is to develop a professional, well-trained, politically neutral civil servants' body, able to meet EU performance standards, with the aim of making public administration more efficient as well as improving relations between the administration and citizens (NACS, n.d.).

NACS objectives are annually set. For 2022, the NACS objectives consist of (I) professionalization and prestige for the civil service; (II) contribution to the development of a smart administration; (III) management of the NACS-related reforms and investments included in the National Recovery and Resilience Plan; respectively (IV) attracting new external funds and managing projects under implementation (NACS, n.d.).

NACS is headed by a President with the rank of Secretary of State, assisted by a Vice-President with the rank of Under-Secretary of State, appointed by the Prime Minister on the proposal of the Minister responsible in the field of public administration (GEO no. 57/2019). The President of the NACS is a tertiary budget owner/holder; in the exercise of his duties, he issues normative and individual orders (GD no. 785/2022).

The current legislation establishes as duties of the NACS, without being limited to, the elaboration and proposal of policies and strategies on the management of civil service and civil servants; carrying out the record-keeping and management of civil servants; providing, upon request, expert assistance to the human resources departments of public institutions; elaboration of competency framework; elaboration of the annual report on the management of civil service and civil servants; organization of the recruitment stage of the competition for filling vacant civil service positions for central public administration (GEO no. 57/2019).

From an organizational point of view, the following directorates and directorates-general operate within NACS: a) Directorate-General for Civil Service Management and Public Service Reform; b) Directorate-General for Legal Affairs; c) Directorate for Externally Financed Programmes and Public Policies; d) Directorate for Resources and Institutional Capacity; e) Directorate for Information Technology and Digital Transformation (NACS b., 2022).

In view of its mandate and through the National Recovery and Resilience Plan (NRRP) funding, NACS is working to operationalize a number of measures, which will ensure a paradigm shift in the area of human resources management and the acceleration of digital transformation in Romania's

public sector. Among them, this paper will cover the development of the civil servant management platform E-ANFP, the development of SIMRU (Integrated Human Resources Management System) and the operationalization of the civil servants' national recruitment competition.

2.4. E-ANFP

The HRM reforms initiated by NACS aim to transform the traditional way in which public institutions carry out their duties, placing performance at the heart of public service.

These reforms include the development and expansion of the E-ANFP civil service management platform. E-ANFP will be an integrated record-keeping and management tool operated by NACS, which will allow monitoring, data collection and a better, more complex management of the professional dossier (Ministry of European Investments and Projects, 2021). Its development is foreseen as an integral part of Investment No. 10 - Digital Transformation in Public Service Management of the National Recovery and Resilience Plan (NRRP).

Its objective is to digitally transform the services offered by NACS to internal and external beneficiaries and thus to better fulfil its institutional mandate (Ministry of European Investments and Projects, 2021). Through the operationalization of E-ANFP, NACS will be in line with a smart administration that aims at fulfilling its tasks through innovative systems that provide qualitative, reliable and fast services (NACS, 2022a).

The platform will encompass all processes from on-boarding to performance appraisal, promotion, and departure from the public system, based on the competency framework model and standardised job descriptions (Ministry of European Investments and Projects, 2021).

From a technical point of view, E-ANFP is using, on the one hand, Business Intelligence architecture and, on the other hand, RPA assistants. Predominantly, the Business Intelligence architecture contributes to the consolidation of work force planning and talent management. Complementarily, RPA assistance helps both NACS staff and external beneficiaries by providing direct assistance in processes such as career management, verification of diplomas/certificates, generation of pre-defined messages, task prioritisation, directing beneficiaries to a support centre, smart forms and so on. Therefore, one can observe that NACS acts as a pioneer, introducing typical elements of either the private sector or developed European administrations into the Romanian public sector HRM. According to the NRRP, the implementation of E-ANFP will entail, but not be limited to, outsourcing services for the development of IT systems, extending the IT systems, procuring hardware/software, establishing partnerships leading to interoperability between databases, developing a methodology defining the use of the platform that will include working procedures and tools, and so on (Ministry of European Investments and Projects, 2021).

2.5. The Integrated Human Resources Management System - SIMRU

In its effort to ensure an effective public sector human resources management based on interoperate IT systems, NACS aims to operationalize the Integrated Human Resources Management System (SIMRU) platform. The development of SIMRU is also foreseen as an integral part of Investment No. 10 - Digital Transformation in Public Service Management of the NRRP (NACS, 2022b).

SIMRU will be a human resources management platform, used internally by the central public administration to perform automated, standardised and unitary processes such as personnel data management, organisational management, time management, goal setting and reporting, clocking-in, leave requests and training records (Ministry of European Investments and Projects, 2021). Thus, SIMRU is addressing a deficiency in HRM in the Romanian public sector, namely the lack of self-service. The introduction of these functionalities will bring an already established HRM practice in the public sectors.

SIMRU is inspired by another HR platform, namely SYSPER, which is used in the European Commission. Since its development (2001), SYSPER has undergone constant updates. SYSPER supports personnel administration processes (recruitment, career management, organization chart, time management), and it also enables performance assessments and promotion (European

Commission, 2007). Until the introduction of this digital platform, the European Commission faced fragmentation of data related to its staff, but with the operationalization of Sysper2, the principle of "uniqueness of information" was introduced, which implies eliminating duplication of data entry by proper integration of the back-office systems and by data sharing (European Commission, 2007). Taking into account that Romania faces the same problem of data fragmentation, the introduction of SIMRU can address this deficiency and thus contribute to increasing the quality of public administration. In terms of impact, the implementation of SIMRU will ensure the following innovative elements: (I) the introduction of collaborative elements in human resources management, such as self-services and self-management; (II) the maximization of Open Government Data in order to support the civil service public policies; and (III) exploring the possibility of extending SIMRU at least to civil servants in central public administration, with the voluntary accession of local public administration (NACS, 2022b). According to the NRRP, the implementation of SIMRU will entail, but not be limited to, outsourcing services for the development of IT systems, establishing partnerships leading to interoperability between databases and IT systems available across institutions, and piloting the use of the platform (Ministry of European Investments and Projects, 2021). Lastly, a distinction must be made between E-ANFP and SIMRU. In this regard, NACS staff provided a schematic analysis highlighting the differences between the two concepts, adapted below as Table 2.

Table 2. E-ANFP VS SIMRU

Table 2. E-ANTI VS SIVIKU			
	E-ANFP	SIMRU	
Purpose and role of the platforms	 Management of civil servants at central, territorial, local level (data, information, and supporting documents) for all processes related to career management. Public institutions will report data and upload supporting documents related to the career path of civil servants for NACS to ensure the record keeping, management and issuance of documents in accordance with its institutional role. 	The platform will ensure, for central level public institutions, the internal HRM processes in a unified and standardised way.	
Target group	 Civil servants at central, territorial, local level. HR departments of public institutions at central, territorial, local level. 	 Human resources departments at central public administration level. Central public administration personnel. (Local public administration may join voluntarily) 	
Functionalities	 Interactive and collaborative management platform for all processes related to the career path of civil servants, from recruitment, assessment, promotion, departure from the public system, based on the competency framework model and standardized job descriptions. Business Intelligence Architecture and RPA (Robotic Process Automation). 	Ensures the delivery of integrated HRM services for central administration in an automated/standardized way for internal processes such as: Strategic management, i.e. setting institutional objectives; Organizational management, i.e. organization chart, job descriptions, etc.; Career management, i.e. recruitment, promotion, performance appraisal, professional training, reporting, etc; Time management: time records, leave requests, etc.;	
Interoperability	It will allow interconnection with collaborating institutions, and it will ensure interoperability with other national registers.	With the E-ANFP platform.	

Source: adapted from NACS internal informations

The pilot project for the National Competition is implemented through the project co-financed by the European Social Fund through the Administrative Capacity Operational Programme (POCA) 2014-2020 "Development of a unified human resources management system in public administration", SMIS Code 119957, SIPOCA 136, for the category of junior civil servants and for the category of senior civil servants, and its extension is done through the NRRP.

The competition to fill vacant civil service posts at central and territorial level has two stages:

- a) the recruitment stage is carried out through a national competition organized by the National Agency of Civil Servants and it consists of a test of general knowledge and competencies required to hold a public position. Persons who pass the national competition become eligible for participating in on-the-job competitions for public offices in central and territorial public administration, and they do not acquire the status of civil servant. Passing the national competition confers the right to participate in the competition for a post for a maximum period of 3 years starting from the date of passing the national competition (Excepted from this recruitment procedure are those who benefit from special statutes, according to Article 467 paragraph (3) of GEO No 57/2019).
- b) the selection stage, which consists of verifying the specialized knowledge and specific competencies required to occupy a vacant public office, carried out by means of an on-the-job competition organised by each public institution, in which only those who have passed the national competition may participate. Additionally, the National Agency of Civil Servants is responsible for coordinating this process.

This new recruitment framework aims to implement an integrated human and financial resource management system based on competence and performance and to continuously match staff needs with the appropriate competencies and develop them accordingly.

The national competition is therefore based on digital processes, i.e. an IT system for submitting applications and conducting the competition test.

There are eight stages of the national competition: a) planning the recruitment process; b) advertising campaigns; c) selection and appointment of recruitment board members; d) application phase; e) eligibility check of candidates; f) preliminary testing of candidates; g) advanced testing; h) management of "graduate" candidates. (The report entitled IT Architecture for the National Competition is part of Output 4 Recruitment System developed under the Technical Assistance Services Agreement for the Development of a Unified Human Resources Management System in Public Administration, signed by the General Secretariat of the Government with the International Bank for Reconstruction and Development, page 13)

a. Planning the recruitment process

In order to organise the pilot project, public authorities and institutions are required to forecast the need for general civil service positions at junior professional level and for senior civil servants category for the period of the pilot project. The National Agency of Civil Servants shall centralise the need for civil service positions submitted by them.

b. Advertising campaigns

The announcement of the national competition shall be published in the Official Gazette of Romania, Part III, and on the website of the National Agency of Civil Servants, at least 30 calendar days before the date set for the competition, and it shall include information on the number of public posts for which the pilot project is being organized, identified by category, class and, where appropriate, professional grade, the period and procedure for applying for the competition, the periods during which the tests in the recruitment phase will be held, the contact details for applying for the competition including correspondence address, telephone, e-mail, contact person and public office held, the place where the tests in the recruitment phase will be held.

c. Selection and appointment of selection board members – rules of appointment and conflict of interest and incompatibilities regime

d. Submission of applications

identifier.

This phase is realized by registering each interested person on the competition IT platform by filling in a compulsory registration form for the creation of an electronic account. The registration form contains the following information: surname, first name, personal identification number, type, series and number of identity card, e-mail address, mobile phone number, password associated with the account, security question and answer to the security question. By filling in the registration form, the interested person agrees to accept the terms and conditions of the pilot project organization, the processing of personal data under the terms of the law, and to allow receiving notifications sent via the competition IT platform. After saving the account data, the interested person receives the data required for validation on the e-mail address provided and then has access to the functionalities of the IT competition platform. Moreover, the interested person can create her individual competition profile by uploading the documents required for registration for the recruitment phase of the pilot project (creating individual competition profile is not equivalent to the actual registration for the recruitment phase of the pilot project. Each profile registered on the competition platform has a unique identifier associated, visible in the individual profile, which is used for all communications concerning the candidate, including the communication of the tests results in the recruitment phase of the pilot project. The person concerned may update permanently her individual profile, by filling in information and attaching additional documents or modifying them as appropriate).

The recruitment phase consists of 3 successive rounds, namely: eligibility check of candidates, candidates' preliminary testing and advanced testing. The pilot project is run for two categories of civil servants: junior civil servants and senior civil servants. (Chapter IV - Conduct of the recruitment phase of the pilot project of the Draft Government Decision approving the rules on the organisation and conduct of the pilot project of the competition for filling vacant public posts.

The person applying for the category of junior civil servants must upload the following documents on the IT platform: a) the application form to be completed online; b) a copy of identity card; c) copies of professional diplomas or equivalent.

Additionally to those above-mentioned, the person applying for the senior civil servants' category must upload the following documents on the IT platform: a) copy of the master's degree in the field of public administration, management or in the specialty of studies required for the exercise of the public function, as appropriate, if the candidate's graduation or bachelor's degree is not equivalent to a master's degree in the specialty, b) copies of certificates or documents proving that the candidate has completed specialized training programmes for public office in the category of senior civil servants organized by the National Institute of Administration or has served a full term as a Member of Parliament, c) copy of the employment record and/or certificate issued by the employer for the period worked, proving seniority in employment and in the field of study required for public office. Each stage will be based on IT compositions either existing or to be created so that the national competition ensures fairness and inclusion for all candidates. The system shall offer the possibility to apply in a simple, transparent way, through efficient procedures based on clear eligibility criteria. Through the IT competition platform, interested persons who have created an individual candidate profile are automatically notified of both the start of the application period for the recruitment phase of the pilot project and its completion. At the start of the application period, candidates can constitute their competition file by uploading the documents contained in their individual profile from the competition IT platform to the sections predefined for this purpose. You may complete or change the contents of your competition file at any time up to the closing date for registration, after which the

competition website will not allow anymore to complete or change the contents of your competition file. Each candidate will be given a competition file registration number which will be utilised for communicating the tests results in the recruitment phase of the pilot project, together with the unique Verification of candidates' eligibility consists of checking that the conditions for participation have been met, on the basis of the documents in the competition files submitted by the candidates.

Within a maximum of 15 working days from the closure date for applications, the selection board will check the eligibility of candidates.

Furthermore, when the results of the eligibility check are published, candidates who have been declared 'successful' are automatically notified, via the competition IT platform, of the possibility of choosing, within 3 working days, for any of the test centers provided by NACS.

The pre-test is the test of the recruitment phase of the pilot project which consists of 4 grid tests, which verifies the general knowledge in the field of public administration; language skills in English or French; digital skills and cognitive skills of the candidates and lasts at the most 3 hours, by successively taking the 4 grid tests. The test is entirely computer-based, using the competition's IT platform in test centers. Candidates are notified via the IT platform of the test date, time, center and access conditions.

Candidates access the computerized platform with their allocated username and password from the system and a unique test code provided by the secretary of the selection board. The computerized competition platform automatically and randomly generates the tests in sequence for each candidate. Candidates are not allowed to hold or use any source of consultation or mobile phones or other means of remote communication during the test, including the formalities prior to and after its completion. Otherwise, the candidate will be eliminated from the competition and the contest committee will enter the mention "cancelled" in the competition computer platform by filling in the candidate's individual section accordingly. After the expiry of the allotted 3 hours, the test module of the competition computer platform is automatically closed. If the candidate completes the test before the allotted time expires, she may close the test module and leave the test center. After completion of the test, each candidate receives a report containing her answers to the grid tests in the individual profile on the competition computer platform.

The advanced test is taken only by persons who have passed the preliminary test, and they are notified by e-mail and in their individual profile on the competition platform of the date and time of the test, which consists of a check of general competences in accordance with the rules on the content, competence and procedure for drawing up and approving competence frameworks.

Advanced testing is carried out by direct observation of the candidate's behavioral indicators, which define general competences at the required level of complexity. Direct observation of behavioral indicators is carried out by applying specific methods: case study, presentation, role play, behavioral interview, group exercise, which are selected by the assessment center and made known to the candidates prior to the advanced test.

At the end, an individual report is generated for each candidate containing information on the candidate's general competences and their level of complexity. Passing the preliminary test is achieved by candidates obtaining at least 60% of the marks allocated to each grid test, and the results are posted with the words "passed" or "failed", as well as the marks obtained for each grid test, within a maximum of 3 working days after all candidates have completed the grid tests. The results of the pre-test are communicated to all candidates at the same time, by e-mail and on the candidate's individual profile, as well as on the Agency's website, in the section specially created for this purpose. Upon notification of the result, each candidate will receive, by e-mail and on the candidate's individual profile, the marking scale for the tests taken and the candidate's answers. Candidates whose individual reports attest that they have each of the general competences laid down in the rules on the content, competence and procedure for drawing up and approving the competences frameworks are declared "admitted" to the advanced test.

e. Management of "graduate" candidates

The management of the group of candidates who have passed the recruitment phase of the pilot project shall be carried out by the Agency, via the IT competition platform, for a maximum period of 3 years from the date of passing this phase for each candidate. During this period, candidates are

automatically notified, by e-mail and in the candidate's individual profile on the IT competition platform, of the organization of competitions for the post. After the expiry of the 3 years, candidates are automatically removed from the group of candidates eligible to participate in the competition per post.

Candidates who have passed the recruitment phase of the pilot project can manage their individual profile in the IT competition platform on an ongoing basis by updating it with relevant documents obtained after the recruitment phase has been completed. The competition IT platform offers the possibility for candidates to opt for individualized notifications on competitions per post. Candidates who have passed the recruitment phase of the pilot project cannot delete the documents uploaded to the competition platform on the basis of which they were declared successful in this phase.

After the organisation of the national competition-pilot project, an analysis will be made based on the experiences of how the pilot phase of the national competition (organised from semester 2 in 2022) for junior and senior civil servants was conducted. The analysis will include conclusions and recommendations for extending the competition to central government in September 2023 for all categories of civil servants. Then extension of the pilot project will be done through the NRRP.

3. CONCLUSIONS

NACS' efforts to reform the public sector HRM model are a significant step forward. The inclusion in the NRRP of the measures relating to the development of SIMRU and E-ANFP, as well as the extension of the national recruitment competition, removes financial barriers to reform.

All three measures contribute to a true digital transformation, based on comprehensive digitalization processes, as defined by Strohmeier (2020). Moreover, the intention to rely on interconnected and comprehensive digital platforms is in line with trends seen in large private organizations (Occean et al., 2017). Thus, drawing inspiration and adapting the tools typically used in the private sector or in developed public administrations will lead to the provision of higher quality public services, especially in the context in which the New Public Management is still impacting the way public administrations operate at European level. The analytical framework developed in this paper has contributed to the identification of the main barriers that may affect the digital transformation of HRM in public institutions in Romania. Among these we can mention:

- fragmentation of strategic human resources management in public administration;
- current HRM lacks adequate tools and skills in today's technological context;
- data on public administration employees is collected and managed in a fragmented way;
- shortcomings in linking institutional needs with employee competencies, career and performance management;
- shortcomings in HR departments: technology gaps, overloaded personnel, excessive bureaucracy, competency gaps;
- lack of awareness and prevention of corruption in public administration;
- high number of temporary appointments (without competition) to senior management and senior civil service positions;
- the performance appraisal has a formal role;
- the recruitment system is not competitive nor sufficiently promoted;
- self-services are missing;
- the IT infrastructure of public institutions is technologically outdated;
- poorly interoperable and has a low level of cybersecurity;
- the lack of standardisation of key MRU data;
- the lack of modern data analysis methods;
- and the lack of self-service;
- Poor DESI results:

The operationalization of E-ANFP will mark the introduction of innovative elements such as Business Intelligence Architecture and RPA (Robotic Process Automation) in all public service and civil

service management processes, thus contributing to the realization of the institutional mandate of NACS in a more performative way, specific to a smart European administration.

The operationalization of SIMRU, will help public institutions that join this platform, by saving time and other institutional resources, as well as empowering public institution management and HR departments to perform strategic tasks.

The extension of the national competition will correct some of the shortcomings associated with the recruitment system and will attract young professionals to the public administration, thus contributing to the improvement of the whole public administration.

Lastly, NACS measures envisaged in the NRRP are essential for "future-proofing" of HRM in the Romanian public sector.

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