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“MIHAI VITEAZUL”
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**INTELLIGENCE AND SECURITY
IN THE 21ST CENTURY**

THE INTEGRATION OF EMERGING TECHNOLOGIES INTO INNOVATIVE SMART NATION PROJECTS AND SOLUTIONS

Laurențiu-Octavian MUTULEANU*

Abstract:

In the current circumstances of accelerated technological and economic evolution, the success of nations depends on the level of education in their society, as well as its imminent consequences, such as the performance of human capital revealed by the efficiency of innovative solutions adopted to understand and address community issues with the aim of increasing social welfare. To achieve this goal, it is necessary to integrate and exploit emerging technologies (such as Artificial Intelligence, Virtual Reality etc.) in innovative Smart Nation projects adopted in the fields of education and research, as well as in areas that focus on solving and optimizing issues in other community services. Using literature review research methodology, this research argues that Romania, with its historical commitment to impactful projects such as Smart Nation (i.e. Spiru Haret's "education reforms" and Dimitrie Gusti's "Science of the Nation"), stands poised to leverage its competitive edge in implementing contemporary initiatives.

Today, for the successful adoption of Smart Nation projects and solutions, it is necessary for government and private entities to generate multidisciplinary collaboration platforms that use and exploit technological advancements to achieve two main objectives.

Thus, Smart Nation projects and solutions would ensure the functions of accumulating, generating, and disseminating knowledge and innovation (technological and social), with the aim of developing human capital and translating these strategic advantages (knowledge, innovation, human capital) into innovative products and services for understanding and solving societal issues, ultimately contributing to the increase of community welfare.

Keywords: *Smart Nation, Artificial Intelligence, human capital, innovation, network analysis, education.*

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Introduction

In the current circumstances of accelerated technological and economic evolution, the success of nations depends on the level of their education, as well as on the immediate consequences, such as the performance of human capital revealed by the degree of efficiency of innovative solutions adopted in order to understand and solve community problems with the aim to increase social welfare. In this article it is argued that in order to achieve this objective, it is necessary to integrate and exploit emerging technologies (such as Artificial Intelligence, Virtual Reality, Augmented Reality, Quantum Computing, etc.) in projects and innovative Smart Nation solutions adopted in the area of education and research, as well as in the fields aimed at solving and optimizing the problems of other community services.

Romania has a tradition of adopting projects with community impact as Smart Nation through the contributions of Spiru Haret "education reforms" and Dimitrie Gusti "Science of the Nation". Using literature review research methodology, this paper sets out to show that these historical contributions could be a competitive advantage in the implementation of current Smart Nation projects and solutions, whose implementation efficiency and generation of desirable effects at the community level would depend on the degree of exploitation of the capabilities available to emerging technologies.

Today, for the implementation of Smart Nation projects and solutions, it is necessary for governmental and private entities to generate multidisciplinary collaboration platforms (innovative ecosystems) that use and exploit the technological advance to achieve two objectives. First of all, for administrative purposes (as for the use of emerging technologies), in order to stimulate and integrate the innovative contributions of the participants willing to get involved in processes of understanding and solving community problems (from education and other fields). Secondly, for innovative purposes, for the exploitation of disruptive technologies by the social entities participating in the projects, by capitalizing on the capabilities of emerging technologies in order to streamline the processes of research, discovery, invention and production of services and innovative entrepreneurial products for solving community problems.

Thus, Smart Nation projects and solutions would ensure the functions of accumulation, generation and dissemination of knowledge and innovation (technological and social), in order to develop human capital and transpose these strategic advantages (knowledge, innovation, human capital) into innovative products and services of understanding and solving society's problems with the aim of increasing community well-being.

The usefulness of emerging technologies within educational processes and the development of innovative solutions

In the current context of international relations characterized by accelerated competitiveness, the success of nations depends above all on the level of development of the communities' learning and adaptation skills (Hellvig, 2023), essential elements of the accumulation of knowledge and the habit of advancing knowledge with effects in acquiring some strategic advantages in the competitive context of international relations.

To strengthen the capacities of learning and adaptation at the community level, after the Second World War, and especially during the last years, nations such as the United States of America¹, Sweden²,

¹ The National Science Foundation Project (Roosevelt, 1945), "After World War II, Vannevar Bush proposed the creation of a national research foundation to finance scientific research and develop national science policy. This proposal led to the creation of the National Science Foundation (NSF) in 1950. The inspiration for the creation of the NSF also included an answer given to President Roosevelt to four questions raised by him: 3) What should the government do now and in the future to support research activities through public and private organizations; 4) Can a concrete program be proposed for the discovery and development of scientific talent for young Americans so that we achieve the continuity of scientific research at a level comparable to that during the war?" text taken from (Sebe, 2010, 282)"; and the Smart Nation Project exploiting open sources to create the opportunity for citizens to participate in decision-making processes aimed at understanding and solving problems of community impact (Steele, 1996).

² Dedijer's project, to implement a national intelligence system based on the exploitation of open sources to obtain strategic advantages. He believed that innovation is more likely to occur in open environments, encouraging interaction between researchers (basic research) and companies (applied research) (Dedijer, 1994).

Great Britain³ or Singapore⁴ have adopted Smart Nation⁵ projects, through which they oriented their efforts for the accumulation, generation and diffusion of knowledge and innovation (technological and social), in order to develop human capital and transpose these strategic advantages (knowledge, innovation, human capital) into innovative solutions to solve society's problems with the aim of increasing community well-being.

In the 19th-20th centuries, through the "education reforms" project adopted by Spiru Haret and the "Science of the Nation" project conceived by Dimitrie Gusti, Romania made progress in the accumulation, generation and dissemination of strategic advantages, knowledge and innovation respectively, considered resources for human capital development and innovative solutions to solve society's problems in order to increase community well-being.

In the global context marked by a new technological revolution induced by cycles of innovation characterized by the emergence of disruptive/emerging technologies such as Blockchain, 5G, 6G, Big Data, Crowdsourcing, Data science, Internet of Things, Artificial Intelligence (IA), Virtual Reality, Augmented Reality, Quantum Computing, etc., in order to gain competitive advantages and increase social well-being, Romania needs to direct strategic efforts towards the adoption of Smart Nation type projects and associated technological solutions.

The adoption of Smart Nation projects and solutions means the exploitation of emerging technologies linked to open and official sources for the development of innovative products and services to improve the decision-making process aimed at understanding and solving community problems, including supporting the public function of training (education) and modelling community that lead to the

³ Through the Alan Turing Institute's Artificial Intelligence for Science and Government (ASG) research programme, the UK government is funding a number of projects using AI technology that exploit open and official sources with the aim of producing those technological solutions that help manage challenges with community impact.

⁴ Technologies based on AI and OSINT exploitation are being developed within the Smart Nation project launched by the authorities in 2014.

⁵ Seen as projects (political and with private interest) with community impact or as integrated or associated innovative technological products and services.

development of human capital (human resource education) with cultural identity status.

In fact, Smart Nation projects and solutions represent multidisciplinary platforms (social ecosystems) for stimulating citizens/social entities to participate in processes of accumulation, generation and dissemination of knowledge⁶ and technological and social innovation, through their contributions to acts⁷ of debate, deliberation, research, discovery and invention, with the aim of developing innovative products and services necessary to increase social well-being.

It is worthwhile highlighting the existing cyclicity in the relationship between Smart Nation projects and solutions and the development of human capital. On one hand, Smart Nation projects and solutions contribute to the education of human resources, and on the other hand, they stimulate human capital to participate in the development of high-performance innovative products and services, aiming at the transposition of these strategic advantages (knowledge, human capital, and innovation) in innovative products and services.

Therefore, the cycle specific to the Smart Nation paradigm integrates processes such as “emerging technologies (AI, OSINT, etc.) – accumulation, generation and diffusion – knowledge, innovation – education, shaping human capital” in order to understand and solve community problems (including in the area of education, in the sense of human capital development), through innovative products and services, with effects in supporting social well-being.

The main objective of the current research is to identify the main Smart Nation policies and solutions, both from Romania and from other countries, in order to argue the need to adopt Smart Nation policies and solutions against the backdrop of the new disruptive technological context and to present the main advantage that appears as an effect of these policies and solutions implementation, by exploiting emerging technologies, respectively improving the quality of life.

⁶ Implicitly of the knowledge that respects the criteria of conservation of identity cultural values.

⁷ Which also involves the consultation, distribution and deepening of information not reduced to entertainment, as well as the training/orientation in an ethical spirit of public opinion.

The hypothesis associated with the objective refers to the idea that Romania can acquire a competitive advantage in order to obtain the positive effects of the adoption of Smart Nation policies, by exploiting disruptive emerging technologies, respectively improving the quality of life, if the successive cycles of contributions in which the Smart Nation policies fundamentally participated, formulated in the past by Haret and Gusti.

In order to fulfil the objective of this work and test the hypothesis, the literature review⁸ research methodology is applied with the aim of exploiting the main advantages that refer to the integration of data from several research fields to be subjected to a critical analysis, a fact that allows the creation of an overall transdisciplinary perspective on Smart Nation policies and solutions. As a result, this approach allows the formulation of interdisciplinary and integrative research questions, objectives and hypotheses.

By choosing the literature review research methodology, it becomes possible to form a comprehensive understanding of the meaning and advantages of adopting Smart Nation policies and solutions by different states (e.g. USA, Great Britain, Singapore, Romania). Likewise, another strength of the choice of this methodology is the possibility of formulating an evolutionary perspective, considering that the cited authors (e.g. Steele, Dedijer, Deway, Bush, Gusti, Haret) and the Smart Nation analysed policies were adopted in different historical eras and in different conditions of socio-economic and technological development.

Presentation of the fundamental characteristics of the Smart Nation concept

The fundamental characteristics of the Smart Nation projects and the technological solutions associated with this mechanism of social influence result, both from the theoretical contribution of some authors

⁸ "A literature review can broadly be described as a more or less systematic way of collecting and synthesizing previous research" (Baumeister & Leary, 1997; Tranfield, Denyer, & Smart, 2003). "An effective and well-conducted review as a research method creates a firm foundation for advancing knowledge and facilitating theory development." (Webster & Watson, 2002)

to define the concept, and from the practical application of some holistic projects administered centrally at the government level.

The definitions of “Smart Nation” (Robert David Steele-Vivas), “Science of the Nation” (Dimitrie Gusti) and the associated concept “Social intelligence”⁹ (Stevan Dedijer, John Dewey) emphasize a common idea, that of the importance of accumulation, generation and continuous sharing of knowledge and innovation, necessary processes in the act of educating citizens (forming human capital) and community modelling under conditions of ensuring cultural identity security.

An important component of education (human capital development), as a public function exercised through open and official sources and the stimulation of innovation potential (translated into the development of innovative technological solutions), is the continuous exchange (diffusion) of information, not reduced to entertainment, carried out between contributors¹⁰, whose interaction forms networks of participants that facilitate the diffusion of knowledge.

Such an innovative ecosystem increases the chances of a nation’s adaptation by stimulating the potential for innovation, as well as the chances of accessing and using disruptive technologies to create strategic advantages.

- Stevan Dedijer (1982) and Dedijer & Svensson (1994) defines social intelligence as the general ability of a social system that anticipates, learns, manages and adapts to the environment and its rapid changes, with the aim of ensuring security and evolution.
- John Dewey approaches from an academic perspective the main function of the concept, namely the education of human resources, considering social intelligence as a mechanism for

⁹ It is a similar concept to that of Smart Nation, which shows the importance of training and empowering citizens to participate in social processes with the aim of increasing the welfare of the society, an aspect compatible with the fundamental democratic process of participation of “citizens in the life of the city”.

¹⁰ Governmental, private, non-governmental entities or citizens participating in the collection, production and use or consumption of intelligence, turned into a resource that confers competitive advantage through identity, values, potential for social innovation and the integration of intelligence into social processes that bring well-being (Sebe, 2010).

preparing citizens through learning processes in universities, as a continuous flow for ensuring the future generation of human capital (Sebe, 2010).

- Dimitrie Gusti considered that at the centre of the approach regarding the concept of the “science of the nation” is the social mechanism of social learning for the production and dissemination of information and knowledge throughout society, making the academic field responsible for the generation of knowledge through which the human resource is educated (Rus, 2018).
- To survive in the 21st century, every nation must become a “Smart Nation” and involve all its citizens – it is necessary for every citizen to collect, produce and consume information, to form a “Virtual Intelligence Community” (Steele, 1996)

Apart from the functions of education and community modelling, emphasized in the definition of the Smart Nation concept, another representative fundamental criteria is the multidisciplinary character, diversity, respectively polyvalence and pluralism, of the participating (contributing) entities that accumulate, generate and disseminate knowledge¹¹ at the level of society (governmental organizations, private institutions, non-governmental entities, citizens, etc.; with activity in the area of education or in the entrepreneurial environment, political or cultural elites, etc.).

- Dedijer (1982) characterizes social intelligence as a process governed by state or private organizations, to which citizens can also contribute. Among these participants, political elites are responsible for administering (initiating, sustaining and developing) social intelligence within society. Also, another important contribution is made by the multinational companies that initiate and develop specific social intelligence processes on the territory of the host states.
- Dewey (1930) emphasizes the importance of civic responsibility, supporting the need to educate the citizen in the direction of involvement in public policies.

¹¹ Consonant with the values of the cultural contribution space.

Regarding the methods and means of the processes of accumulation, generation and diffusion of knowledge and innovation with educational and community modelling effects, from the primary analysis of the description of the current Smart Nation type mechanisms, implemented in the full age of knowledge, which is characterized by the integration of disruptive technologies, such as AI, with official and open sources, such as the virtual environment not reduced to entertainment (e.g.: Great Britain¹², Singapore¹³, Romania¹⁴), the following changes are identified since the launch of the above-mentioned definitions:

- private¹⁵ and non-governmental entities have a greater contribution than in the past, in the processes of accumulation and generation of knowledge and innovation (by which the acquisition of the advance in knowledge in a more congested competitive context is sought);
- the means of generating knowledge and innovation are more diversified, producing faster, more information per unit of time, being anchored in the current technological advance;
- the means of disseminating knowledge and innovation are faster and allow the adoption of more strategies for spreading information, along with the development of new virtual means, especially through online social networks.

¹² Ex: the project that integrates AI – Raptory.

¹³ Ex: the project that integrates AI – CrowdTaskSG.

¹⁴ Ex: the project that integrates AI – ION.

¹⁵ Daniel David argues in the intervention at the Conference “(Re)awakening Romania: A country plan, now!” about “Romania’s human capital from the perspective of a country plan”, that not only the academic environment forms the human resource, but several entities, and the role of universities may soon become a complementary one in certifying the knowledge acquired by graduates. “Amidst the psycho-behavioral changes of hyper-technological people, globally distributed social, cultural and professional networks may acquire pronounced political valences in the future and we may witness an unprecedented surrender of authority of states to the wave of social libertarianism of cybersocietal origins. The growing influence of social networks on political mechanisms can prepare the ground for the affirmation of global economic and technological actors, major universities and research centers, international platforms for strategic analysis and lobbying or non-governmental non-profit organizations, as equal partners of nation-states.” Fictional geopolitical text taken from Niculae Iancu (2023).

It should be highlighted that Smart Nation projects and solutions, by stimulating and attracting citizens/social entities to participate in decision-making processes¹⁶ with community impact, contribute to the maintenance of fundamental democratic processes, of decision-making transparency, good governance and freedom of information for citizens. Thus, compatibility is generated between disruptive technologies as resources of the knowledge society, and the values of democracy.

In the context of the era of knowledge, the application of the Smart Nation paradigm, given that it engages innovative processes (materialized in products and services, including educational ones) that also involve the exercise of mass education and community modelling functions by exploiting emerging technologies and the power of the virtual environment not reduced to entertainment¹⁷, it can become a strategic advantage for managing the challenges of the competitive international environment. This aspect is achievable in the conditions where the exploitation of disruptive technologies results in the accumulation, generation and diffusion of knowledge and innovation, with the assurance of the security of cultural identity type values, necessary for the development of human capital with cultural identity status.

Fundamental steps of Smart Nation

From the primary analysis of the description of Smart Nation type projects and the technological solutions associated with this mechanism of social influence, at least the following 5 fundamental stages (processes) are identified:

- a) awareness of the importance of knowledge and education;

¹⁶ By engaging citizens in processes of accumulation, generation and dissemination of knowledge and innovation, resulting from acts of debate, deliberation, consultation, distribution and deepening of information not reduced to entertainment, as well as research, discovery and invention processes – with the aim of developing innovative products and services ways that would improve the decision-making process aimed to understand and solve community problems (especially in the educational area).

¹⁷ Actions in the virtual environment of producers and users or consumers of information and knowledge have a scalable effect. With the development of the means of information and virtual communication based on the Internet network, data is spread much more easily at the community level.

- b) ensuring the accumulation and generation of knowledge by creating an easy context (innovative ecosystem);
- c) continuous dissemination of information;
- d) representation of information in comprehensible forms (which facilitates the understanding of the message).

a. Awareness of the importance of knowledge and education. Spiru Haret's education reform¹⁸ is a Smart Nation representative project type of the step regarding raising awareness, being a social influence project that started by increasing the level of awareness of the importance of education among social connectors (agents of influence) in the areas of interest, respectively educational and political (Rus, 2018).

In order to increase the chances of success of adopting the reform, networks of social influence were formed (according to the social intelligence paradigm) consisting of contacts at the educational level (high school principals) and at the regional political level (prefects). They played the role of social connectors (brokers) subjects to influence, in order to promote in their circles of belonging (and at the same time of interest), the idea of the importance of education and to create the need to reform education (Haret, 1905).

b. Ensuring the accumulation and generation of knowledge by creating an easy context (innovative ecosystem). As it is shown from the above-mentioned aspects, emerging technologies coupled to open and official sources are tools that can facilitate the exercise of social instruction and innovation by developing social platforms that facilitate the participation of citizens/social entities in processes of accumulation, generation and diffusion of knowledge and innovation, in order to transpose them into innovative services and products to solve social problems. Thus, it is necessary for disruptive technologies to be used to create innovative ecosystems represented by multidisciplinary platforms coupled to open and official sources to create opportunities and the circumstances necessary to stimulate citizens/social entities to participate

¹⁸ This, although it took place at the confluence of the 19th and 20th centuries, left its mark over time on the development of Romanian society, producing added value through the accumulation, generation and diffusion of knowledge and innovation, as well as the development of human capital, from which Romania benefits even today.

in decision-making processes aimed at understanding and solving impactful community problems (including in the educational field).

In order to increase the chances of participation, it is necessary for Smart Nation projects to function as social platforms (ecosystems) for accumulating, integrating and managing the contributions of authorized participants resulting from the organization/administration (in physical/virtual format) of some social events/forums (such as: conferences, forums, courses, innovation hub events, hackathons, spin-off activities, think-thanks, robofest, etc.).

The accumulation of such contributions would inspire the association of participating entities in order to achieve the common goal of developing innovative solutions (entrepreneurial products and services) to solve community problems (with impact including on the educational field, but also on others) by exploiting emerging technologies following the course/the integration of processes such as debate, consultation, deepening and distribution of information not reduced to entertainment. Finally, these stages would stimulate research, discovery, invention and production of innovative entrepreneurial services and products to solve community problems (including in the educational area through social training, training/public opinion orientation in an ethical spirit¹⁹), thus concluding the Smart Nation conceptual cycle.

Thus, a societal dynamic is created around community problems and the innovative acts necessary to improve the decision-making process aimed at understanding and solving them, as well as, in particular, supporting the educational act at the community level. The societal dynamics manifested through the above-mentioned processes accelerates the potential for the accumulation, generation and diffusion of knowledge and innovation, and maximizes the chances of fulfilling the function of social training/learning (development of human capital), processes necessary for the development of innovative solutions to solve community problems.

¹⁹ Determining the appearance and consolidation in an ethical sense of the cultural trends of society's orientation. The ethical meaning is given by the final goal of the Smart Nation type social projects, namely the solution of community problems for the acquisition of well-being at the level of society, as well as the improvement of Romania's image as an international actor.

In the long term, those desirable and sustainable circumstances are created, typical for Smart Nation type social projects, through which an advance in knowledge is acquired, which facilitates the emergence of innovative ecosystem networks (social platforms). They develop and integrate causally-cohesively in the form of network hubs (conglomerates) in a series-like functioning structure that interconnects the participants (poles of accumulation, generation and diffusion of knowledge and innovation) and their innovative contributions (participation in debate and deliberation activities²⁰, with the aim of developing innovative solutions to community problems).

Such an ecosystem offers the opportunity for participants to be both users of emerging technologies and also vectors that exploit the capabilities of these disruptive technologies, contributing to the development of innovative products and services with community impact²¹.

The participants in the ecosystem contribute to the emergence of the advance in knowledge, both on the intangible component, by stimulating the act of discovery in an innovative sense, and on the tangible component, through invention, production of community services and products, as well as their dissemination (stages of the cycle of innovative succession necessary to confer collective utility on the discovery).

While for the intangible component, represented by fundamental (academic) research-type activities, the focus falls on the process component²², where the vector (carrier) of innovation is the researcher, in the case of the tangible component, represented by applied research-type activities (with increased resonance in the entrepreneurial

²⁰ Which also involves the consultation, distribution and deepening of information not reduced to entertainment in order to stimulate research, discovery, invention and the production of innovative products and services, as well as, in particular in the area of the equation, the training/orientation in an ethical spirit of the public opinion.

²¹ Nvidia CEO, Jensen Huang (2024) said that countries should ensure they own the production of their intelligence (referring to digital intelligence or generating knowledge) and the data produced, while protecting their culture from any negative impacts (talking about "sovereign AI" concept).

²² Representative is the explanation of Payton Usher who claimed that technological innovation is a slow, collective process that does not rely on the genius of great inventors; (Molella and Arthur, 2005).

environment²³), the focus falls on the product component, where the vector (carrier) of innovation is the entrepreneur²⁴.

Connecting the applied research environment with the entrepreneurial one leads to facilitating the access, accumulation and generation of academic (theoretical) entrepreneurial knowledge applied/translated into entrepreneurial products and services. In this sense, there is a need to create frameworks for frequent interaction between the entrepreneurial (business) environment and the academic-university (applied research) environment, which would result in supporting academic entrepreneurship.

Similar ecosystems (policies and circumstances) were developed in the US before and after World War II by people such as Morris Holland²⁵ (who inspired the MIT reform model to apply the research-production cycle, with results today in the transposition of entrepreneurial academic knowledge into (Evers, 2021) spin-off projects such as Boston Dynamics-Hyundai) and Vannevar Bush²⁶ (which inspired the generation and application of the National Science Foundation).

Last but not least, these innovative ecosystems would represent, on the one hand, resources for the generation of human capital (Sebe, 2010), and on the other, a continuous support of democracy, by activating

²³ Joseph Schumpeter's contribution to the theory of innovation applied to the market economy is representative.

²⁴ An example of the overlap of the vectors that are active, both in the area of research and in entrepreneurship, are the 6 people among the 8 authors who developed the scientific article "Attention is All You Need" (2017), also called "Transformers", who have formed a branched entrepreneurial network to found companies (such as Adept, Cohere, Pagoda, Character.AI and Inceptive) that integrate disruptive technologies; (Vaswani et. al. 2017).

²⁵ In 1928, Maurice Holland, Director of the Division of Engineering and Industrial Research at the US National Research Council, produced a document on what he called the "research cycle". He presented the development of modern industry as a series of sequential stages, from basic research to the commercialization of technological inventions. Holland provided arguments to several industrialists for the importance of building research laboratories to accelerate the development of industry (Godin, 2011).

²⁶ Vannevar Bush was responsible for coordinating the research efforts of the US government during the war. After the war, Bush proposed the creation of a national research foundation to fund scientific research and develop national science policy. This proposal led to the creation of the National Science Foundation (NSF) in 1950.

the participatory function, giving the opportunity to governmental actors, non-governmental and private to take responsibility for social training by participating in the act of social and technological innovation (including educational in nature).

c. Continuous dissemination of information. The continuous dissemination of information is a key phase of the Smart Nation project with at least two major implications in the processes of knowledge adoption, generation and diffusion.

An obvious implication of diffusion, defined as viral activity, is manifested in fulfilling the role that the stage of spreading knowledge and innovation has within social ecosystems, namely attracting, stimulating and raising awareness of the need for human capital to participate in the development of solution products and services of community problems.

In particular, within the ecosystems applied in the field of education, an essential role of the diffusion of knowledge and innovation within the Smart Nation type projects is to educate the human resource, through acts of social training and influencing in an ethical sense²⁷ of society (the behaviours of citizens), respectively through the viralization of some educational and community modelling acts, including with a view to determining and consolidating some cultural trends to guide social perception (Bunăiașu, Vlăduțescu, & Strungă, 2014).

An example of innovative public contribution, influencing and shaping the social and virtual environment is the work of Google researchers published in 2017, "Attention Is All You Need", also called "Transformers" (Vaswanin et. al., 2017).

OpenAI, the parent company of ChatGPT, likely benefited from this research by incorporating the "Transformer" architecture into their own language models, such as GPT-4, is one of the most advanced language models currently in use on a global scale. The growing influence of the "Transformers" linguistic model is evidenced by its applied nature, from RNA therapies to Web3 software development, as well as LLM and

²⁷ The ethical meaning is given by the final goal of Smart Nation type social projects, by solving community problems for the acquisition of well-being at the society level, as well as improving the image of Romania as an international actor.

NLP tools. The influence of the “Transformers” activity does not stop there, 6 of the 8 authors of the research created a network of influence that branched out to establish start-up companies (such as Adept, Cohere, Pagoda, Character.AI and Inceptive) that integrate disruptive technologies.

Considering that the diffusion of information is a social (mass) phenomenon, in order to increase the chances of influencing the adoption of desirable behaviours by the citizens, it is necessary to apply information communication strategies (with attractive content) adapted to the technological peculiarities of the current virtual environment, as the principal channel of information and cultural orientation of public opinion, as well as the particularities of the user profile.

Considering that both the entire virtual environment and online social networks operate on the structure of the Internet-type network, which can be analysed based on the principles of network science, this aspect can be exploited in order to achieve the goal of ethically influencing users by adopting an appropriate strategy for distributing (viralizing) information not reduced to entertainment (Vlăduțescu & Ciupercă, 2013). Thus, following the principles of network science, content with an educational effect can be distributed at the community level through agents of social influence, also known as connectors or brokers, as well as key opinion leaders or influencers who have social capital (Vlăduțescu & Ciupercă, 2014).

In other words, the power of viralization of information available from open sources/OSINT and the virtual environment can be exploited on a community scale by adopting information technology products and services with a role of learning and social modelling, whose functioning would involve the promotion of knowledge (more than the entertainment's) and innovation by challenging and stimulating the participation of citizens/social entities in acts of debate, deliberation and associated activities²⁸.

In this way, with the help of diffusion, social ecosystems with an educational role could be supported, in which citizens/social entities participate with contributions consonant with the specifics of the cultural space of belonging, which would support the formation of social capital

²⁸ Which includes the consultation, distribution and study of information not reduced to entertainment, as well as research, discovery, invention and training/orientation in an ethical spirit of public opinion.

with cultural identity status, necessary for the development innovative products and services to solve community problems in order to achieve social well-being.

This is one of the solutions to solve the perennial problem of society, defined by Spiru Haret as the need to “transform into organic qualities what is obtained as a temporary effect of education” (Sebe, 2010).

By replacing propaganda and entertainment with debate, deliberation and related activities, it aims not only to challenge the function of community education and the act of innovation, but also to secure freedom in a democratic framework.

In other words, by participating in the acts of debate, deliberation and associated activities, citizens would increase their chances of accumulating the cognitive resources necessary to treat informational sources in a critical-analytical key (so as to consider cultural identity landmarks), so necessary to the dynamic context and abundant current information. It is desirable that the cultural status of citizens contains protective cognitive resources²⁹ (analytical adaptive skills) such as: critical thinking, reflective thinking, autonomous thinking, design thinking, entrepreneurial thinking, learning techniques, a set of representative values, etc.

In this way, open source/OSINT and virtual environment with online social networks are considered and exploited at the community level, not only as a means of entertainment, but also as a supporting framework for the development of services and products to solve social problems, including for supporting the public function of social training.

The second implication of the diffusion of information, whose emphasis in definition falls on the exchange of information, more than on viralization, is manifested in the stages of accumulation and generation of knowledge and innovation, within social ecosystems, through the many connections between participants and contributions which diffusion facilitates/trains to emerge through/within processes of debate, deliberation and associated activities. Thus, the act of innovation transposed into the development of services and products to solve community problems is provoked.

²⁹ Bill Gates and the founder of Khan Academy discussing in 2023 about how artificial intelligence will transform education.

An example of a network of people that has contributed decisively in the last 25 years to the translation of innovation into technological solutions for solving community problems is the network of entrepreneurs so called “PayPal Mafia”, which contributed to the founding of PayPal. This network of entrepreneurs is still active in Silicon Valley, leading and investing together in other companies that use disruptive technology (some exploiting open and official sources), such as: Palantir, YouTube, Tesla, Neuralink, Yelp, LinkedIn, etc.

Another example is currently applied in Singapore, where the Punggol Digital District (PDD), which is expected to become the country’s main smart district, is being actively developed. PDD aims to be an innovative hub for work and life, encouraging collaboration and interaction between innovators and the community to bring ideas towards a result

Examples of social ecosystems are the initiatives of Great Britain³⁰ and Singapore³¹ to invite citizens/social entities to collaborate for the development of Smart Nation type projects, which integrate AI technology and OSINT information solutions, with the aim of identifying innovative solutions to problems with community impact.

d. Representation of information in comprehensible forms. Emerging technologies, integrated in Smart Nation projects and solutions, can be used both for the accumulation and generation of informational content (not reduced to entertainment) and for its community dissemination (viralization) through open sources/OSINT (implicitly the virtual

³⁰ Through a series of projects funded through the Alan Turing Institute’s “Artificial Intelligence for Science and Government” (ASG) research programme, the UK government is showing that taking the open and collaborative approach of inviting citizens and social entities to participate in producing innovative solutions for the management of community challenges (such as those of a medical, climatic nature, affecting public safety, etc.) is a strategy for capitalizing on the advantages offered by disruptive technologies, effective in solving social problems.

³¹ In 2014, the “Smart Nation Initiatives” Project was launched in Singapore in order to capitalize on the technologies introduced by the fourth industrial revolution, which involves the integration of artificial intelligence and related algorithmic processes to implement them at the national level with the aim of improving government policies and services such as those in health, education, transport, urban life, business and the entrepreneurial environment.

environment with component of social networks) and, if the case, through official sources channels.

With the aim of increasing the chances of the attractiveness and understanding of the informational content³² disseminated at the level of society through Smart Nation projects and solutions, as well as in order to stimulate and promote the participation³³ of citizens/social entities in decision-making processes aimed at understanding and solving problems with community impact, there is a need for semantic adaptation and representation of information in a form that is comprehensible and appropriate to the cultural profiles of citizens/users.

Smart Nation projects and solutions in Romania

In particular, in Romania, the series of succession of Smart Nation type social projects was triggered at the turn of the 19th–20th centuries through the remarkable domestic contributions “education reforms” (adopted by Spiru Haret) and “Science of the Nation” (supported by Dimitrie Gusti), which created the organic social circumstances of accumulation, generation and diffusion of knowledge and innovation, necessary for the development of human capital and innovative solutions for understanding and solving society’s problems for the increase of community well-being.

Highlights of the Smart Nation project “Education reforms” adopted by Spiru Haret. As he considered that the education is the key to achieving social well-being, Spiru Haret reformed the social structure of Romanian society by implementing a Smart Nation social mechanism of education and community modelling (development of human capital), implemented top-down and bottom-up, which ensured the accumulation,

³² Not reduced to entertainment, in order to influence society in an ethical sense through educational and community modeling acts, including by determining and consolidating cultural trends to guide social perception.

³³ Participation in the processes of accumulation, generation and dissemination of knowledge, respectively the acts of debate, deliberation, consultation, distribution and deepening of information not reduced to entertainment, as well as the processes of research, discovery and invention – with the aim of transposing them into services and products for the solution of problems with community impact (especially in the educational area).

generation and diffusion of knowledge and innovation in Romanian society, with effects even today (Haret, 1910/1969).

In order to implement the social modelling program, the former Minister of Education created extensive networks of social influence that included the most influential functions/professions of society at the central, regional and local levels, respectively those exercised by politicians, educators, researchers and priests, among whom the level of awareness of the importance of education has increased. They were co-opted and influenced to participate in the conception, implementation and promotion³⁴ of a mass instruction project whose main objective was to educate the human resource, respectively to acquire the necessary skills to solve society's problems to increase community well-being (Haret, 1910/1969).

At the basis of the strategic thinking of the Smart Nation project managed by Spiru Haret, with effects in the accumulation, generation and diffusion of knowledge and innovation, as well as the development of human capital, there was a new capital concept with two components, respectively the "intangible" and "tangible" one. It should be emphasized that the intangible dimension is represented in the cycle of innovation (discovery - invention), through discovery, which implies research activity with beneficial effects in closing a knowledge gap by compensating it. Successively, the tangible component is represented by the act of invention that gives collective utility to the discovery by developing innovative solutions to solve society's problems to increase community well-being (Sebe, 2010).

Another representative cycle for the Smart Nation project adopted by Haret was the division of research into: fundamental, applied, practical and commercial. The concept of practice (representative for the tangible dimension) was defined in accordance with the knowledge advance mechanism, but not before the orientation platform that gives it meaning was realized. For example, when the poor calculation skills of the candidates of the School of Bridges and Roads were discovered, the Society of Mathematical Sciences was established, the centre that offered the necessary circumstances to generate adapted innovative solutions.

³⁴ Also involving the stage of knowledge diffusion, having the role of agents of social influence.

In this way, by applying a mode of action consistent with the logic of the concept of succession cycles, the Smart Nation-type social mechanism of “education reforms” was developed to integrate theory – representative of the intangible, with practice – representative of the tangible (Sebe, 2010).

Highlights of the Smart Nation project “Science of the Nation” designed by Dimitrie Gusti. Complementary to the reforms adopted by Spiru Haret, Dimitrie Gusti designed the “Science of the Nation” program which meant the involvement of social influence networks consisting of influential functions/professions, like those represented by researchers, students, priests, educators and politicians, who were part of and active in several social strata. They were in charge of implementing the mass social learning mechanism, which involved the functions of accumulation, generation and diffusion of knowledge³⁵ throughout society, ultimately aiming at the education of human resources or the production and accumulation of human capital (Rus, 2018).

It should be noted that a current feature of the “Science of the Nation” program is the integration of social and technological innovation, a necessary stage for achieving social well-being in the vision of Dimitrie Gusti (Schuler, 2010 and 2016), an aspect also identified in modern Smart Nation paradigms.

The development of new Smart Nation projects and solutions in today’s Romania

Thanks to the series of successive contributions to the adoption of Smart Nation type projects, which constitute an organic social framework leading to development, Romania can benefit from this competitive advantage through the consonant adoption of new social mechanisms for the accumulation, generation and diffusion of knowledge and innovation for the social modelling and human resource education, with the aim of transposing them (knowledge, innovation, human capital) into innovative solutions for solving social problems that lead to an increase in social well-being.

³⁵ The academic environment was tasked with the process of generating knowledge with the help of which the human resource was trained in order to acquire the skills necessary to participate in solving community problems.

For the successful implementation of Smart Nation type social projects and associated technological solutions, it is necessary to organize innovative ecosystems that exploit the advantages of increased computing power and increased interconnection offered by disruptive technologies, represented by physical and virtual social platforms coupled to open and official sources.

Thus, opportunities are created for citizens/social entities to collaborate transdisciplinary and make innovative contributions to improve decision-making processes aimed at understanding and solving problems with community impact and achieving social well-being.

The innovative Smart Nation “ION” technological solution

A current project developed within the Romanian society and adopted with the involvement of the responsibility of the state, respectively the Government of Romania, is the innovative open source solution “ION”. This is a Smart Nation type technological solution, which integrates social and technological innovation and has the utility of facilitating communication between citizens and governors, with the aim of taking the messages, wishes and problems of citizens from the online environment to process and disseminate them to decision-makers in order to supporting the process of generating public policies in accordance with social reality.

Code for Romania’s Activity

Code for Romania is a community, community-driven type, which forms a very varied interdisciplinary group, in order to develop innovative technological solutions with the aim of solving community problems. Specifically, the association develops applications with social impact in areas such as: information and access to public data, civic involvement, education and the promotion of culture, as well as facilitating access to public services.

Code for Romania designs, builds and manages the social change ecosystem through technology in Romania. The association managed to design and consolidate a functional mechanism to bring together and

direct the huge IT development capacity from Romania and diaspora to deliver digital solutions for the problems faced by the society.

Smart Nation project for the development of human capital in the field of cyber security

On the context background of the increased cyber vulnerability, starting from 2017, in Romania, a Smart Nation project was initiated by the CyberInt National Centre under the Romanian Intelligence Service focused on the development of human capital in the field of cyber security and strengthening cyber security culture.

Thus, entities responsible and directly interested in the promotion of cyber security were mobilized, mainly from the academic environment, as well as from the private and state environment, resulting in university educational programs aimed at developing human capital in the field of cyber security.

Using emerging technologies to manage cybersecurity issues

The adoption of emerging technologies linked to open and official sources currently exposes the users/beneficiaries of the virtual environment to implicit risks due to the perpetuation of vulnerabilities such as:

- a) the virtual environment is based on the vulnerable operating structure (topology) of the Internet network, caused by the advanced degree of interconnection between network nodes;
- b) lack of regulation of the use of new technologies;
- c) the lack of tools to verify the veracity of the product (outcome) generated by emerging technologies such as artificial intelligence.

Considering the context of vulnerability described previously, as well as the intensification of the degree of dependence on the use of emerging technologies to increase professional performance, it is more and more threatening for their users and the virtual environment, a fact that accentuates the need for cyber security (the adoption of products and services of Cyber Security and Strengthening Cyber Culture/Hygiene). This context represents an opportunity for Romania in order to acquire the competitive advantage as an international actor by

accumulating knowledge and learning the advance in knowledge in the field of cyber security.

Hence the need to adopt Smart Nation-type projects and solutions, namely products and services that integrate emerging technologies for managing issues in the field of cyber security in order to achieve the following goals:

- a) the accumulation, generation and diffusion of knowledge and innovation in the field of cyber security aiming, together with the competent human capital, to translate it into the development of cyber security products and services;
- b) development of human capital with skills in the field of cyber security;
- c) developing cyber security culture (safe use of the virtual environment and emerging technologies).

Conclusions

In the near future, the level of quality of life can be improved considerably, both in the states with increased human development index and in the others, if the emerging technological capabilities are exploited (implicitly generative AI, blockchain, etc.), for educational purposes for the development of the human capital necessary for involvement in the generation of innovative products and services, adopted in order to understand and solve community problems.

In this sense, Romanian society needs new governmental and private initiatives, and, ideally, public-private partnerships, investment in the generation of Smart Nation type projects and solutions that ensure the functions of accumulation, generation and diffusion of knowledge and innovation (technological and social), in order to develop human capital and transpose these strategic advantages (knowledge, innovation, human capital) into innovative entrepreneurial products and services useful for solving society's problems.

In fact, to stimulate this process, it is necessary to generate educational and innovative ecosystems represented by (social) multidisciplinary collaboration platforms, linked to open and official sources (such as: conferences, forums, courses, innovation hub events, hackathons, activities such as spin-off, think-thank, robofest, etc.), through which opportunities and circumstances are provided to stimulate

citizens/social entities to participate in decision-making processes aimed at solving problems with community impact.

Against this backdrop, following the completion/integration of processes such as debate, consultation, deepening and distribution of information not reduced to entertainment, associations between the participating entities are stimulated and inspired in order to achieve the common goal of supporting and developing innovative Smart Nation solutions through exploiting the capabilities of emerging technologies.

Finally, the generation of these circumstances of accumulation of multidisciplinary contributions with joint participation, would stimulate research, discovery, invention and production of innovative entrepreneurial services and products to solve community problems, completing the Smart Nation concept cycle.

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REVISITING THEORIES AND BUILDING A NEW RESEARCH AGENDA FOR EXPLAINING RADICALIZATION

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Abstract:

Over recent decades, radicalization, particularly when it leads to violence, has become a critical focus for national and international security agendas and research fields. This article revisits foundational social, psychological, socio-psychological, and psychiatric theories of radicalization, aiming to provide a comprehensive overview of their development and current relevance. Although numerous theories emerged prior to pivotal events such as the September 11, 2001 attacks, this study demonstrates how these perspectives have evolved to address both individual and group-level processes. The discussion synthesizes key aspects of radicalization dynamics, including personal identity crises, psychological vulnerability, group dynamics, and societal influences, highlighting the role of modern digital networks in fostering extremist ideologies. The article concludes with recommendations for refining theoretical approaches and expanding research to encompass emerging influences, such as online communities and familial factors, in the radicalization process.

Keywords: *radicalization, theories of radicalization, terrorism, social theories, psychological theories, socio-psychological theories, psychiatric theories.*

The Need for Revisiting Radicalization: Bridging Past Theories with Emerging Realities

The phenomenon of radicalization, particularly in its violent manifestations, has garnered heightened attention from policymakers, security agencies and researchers globally. In the years following the 11 September 2001 attacks, radicalization has evolved as a primary concern for both national and international security, with a proliferation

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of studies aiming to unravel the complexities behind extremist ideologies and behaviours. While early theories on radicalization emerged well before these events, the intensified focus on terrorism has prompted a reassessment and expansion of classical theories to better address modern forms of radicalization, which are increasingly complex and multi-faceted.

Radicalization is a complex process whereby individuals or groups adopt extreme beliefs, ideologies and behaviours, which may include the justification of violence to achieve political, religious or social goals. Unlike other forms of violence, such as interpersonal violence or crime, radicalization is characterized by an ideological or political motivation, often being perceived as part of a collective project or a “noble” cause. Likewise, radicalization involves a gradual process, through which initial attitudes or grievances gradually evolve into extremist positions that legitimize the use of violence. The boundary between radicalization and other forms of social or political expression is one of stability and depends on factors such as the difficulty of the intention to justify violence, the degree of extremism of the adopted ideologies and their impact on public order and security. Therefore, radicalization becomes visible and problematic when the behaviours or attitudes manifested threaten socio-political stability and promote intolerance or violent confrontation. It is very difficult to establish the limit from which a certain behaviour/attitudes, in a specific socio-political context, can be considered/labelled as radicalization because sometimes even the legislation itself cannot establish this limit. One criterion would be the impact on national security¹. Often, the context and way events unfold is so rapid that legislation lags behind.

The need to revisit radicalization theories stems from the rapidly evolving nature of extremist ideologies and the digital landscapes that amplify them. While foundational perspectives provided valuable insights

¹ For instance, in July 2023 the far-right group Danish Patriots burned a Koran in front of the Iraqi embassy in Copenhagen and online, prompting similar acts in Stockholm, Sweden (BBC News, 2023). Acts of destruction of the Koran in Denmark by far-right and anti-Islam militants in 2023 led to al-Qaeda calls for terrorist attacks in Denmark. A consequence was the adoption of the Danish law criminalizing the public desecration of the holy texts of the religions recognized by the Danish state, including Islam (Szumski, 2024).

into psychological, social, and psychiatric factors influencing radicalization, today's interconnected world calls for a reassessment to address new, complex pathways to extremism. This modern context requires a nuanced understanding that can only be achieved by bridging established theories with recent developments in group dynamics, identity crises, and online radicalization.

This article re-evaluates foundational theories from social, psychological, socio-psychological and psychiatric perspectives, each providing distinct yet intersecting insights into the motivations and pathways leading individuals toward extremist ideologies. Notably, traditional approaches focused on isolated psychological traits or deviant behaviour have gradually expanded to encompass social influences, group dynamics, and the role of identity crises in facilitating radicalization. More recent theories have also highlighted the influence of social networks, both offline and online, in shaping and amplifying radical ideologies, underscoring the need to account for how digital spaces foster and reinforce extremist communities.

It is less about an internal transformation of these theories and more about the analysis of the opportunity for a prospective change, considering the evolution of radicalization in relation to the new context. For example, it should be analysed whether classic theories from the social, psychological, socio-psychological and psychiatric fields, which were valid in the context of traditional radicalization, remain equally applicable nowadays, when interactions are digitized and gamification can work as a facilitating factor, increasing susceptibility to radicalization. The theories discussed in the article mostly refer to offline radicalization processes. The main question that fuelled this article is whether these theories retain their validity in the context of online radicalization, whether intra-psychic processes are similar to offline radicalization, and whether social theories can be applied to digitally mediated interactions. In case of an affirmative answer, we will analyse whether these theories retain their original form in which they were conceived or not.

By examining theories of radicalization across individual and group levels, this study aims to provide a comprehensive synthesis of how these frameworks contribute to our understanding of radicalization in contemporary contexts. Through this analysis, the article addresses

gaps in existing theories, suggesting the need for nuanced research on underexplored areas, such as the impact of familial relationships and online communities. Ultimately, this approach underscores the importance of evolving theoretical models to reflect the dynamic landscape of radicalization, which is shaped by both psychological undercurrents and the transformative power of modern technology.

Psychological, social psychological and psychiatric explanations of radicalization

Radicalization is often seen as a psychological, social psychological and psychiatric phenomenon with the first explanatory attempts seeing the terrorist as an “isolated individual with deviant character traits” (Bryanjar & Skjoldberg, 2004). Hence the oldest theories attempting to explain the behaviour of terrorists from the ‘70s and ‘80s focused on personality traits and problems, while advancing a dominant view that terrorists suffer from a mental disorder, ignoring the extremely complex neurological, psychological and sociological processes by which actors engage in terrorism (Post, 1984; Laqueur, 1987). Since these first attempts, the debate on the topic has significantly advanced including additional psychological and social psychology factors that lead to radicalization.

From a psychological point of view, there are many factors that lead to radicalization processes. It has been suggested that, prior to radicalization, the individual experiences a state of uncertainty about himself and the world (Hogg 2012 and 2013; Doosje 2013; Klein 2013; Meeus 2015), as well as existential anxiety (McBride 2011). Among the psychological factors that cause radicalization there is the sense of identity described as a “search for meaning” (Kruglanski, 2014), the search for identity that contributes to the sense of belonging, value and purpose (Amarasingam & Dawson, 2017; Fein & Borum, 2017; Dalgaard-Nielsen, 2008), personal fulfillment (Silverman, 2017), lack of self esteem (Borum, 2017; Chassman, 2016; Christmann, 2012; Dawson, 2017; Lindekilde, 2016; Senzai, 2015), the emotion of anger (Stout, 2002), individual frustration and insult (Beutler, 2007), social-cognitive factors such as risk-taking and reduced social contact (Taylor, 2006), auto-victimization (McCauley, 2011), displacement of aggression (Moghaddam, 2005).

Alternatively, other factors may be underlying the radicalization process. Thus, for some authors, the feeling of personal uncertainty underlies the process (Ludot, 2016). Radicalization was also explained by the theories of narcissism and grandeur applied to groups, because the figure of the leader becomes for members of the group their egotistical ideal (Veldhuis, 2009). According to this interpretation, due to their grandiose self-perception, narcissists look for external enemies and blame them for their own mistakes. Therefore, they are attracted to radical organizations that stimulate hatred and enmity toward others. However, this hypothesis has not been supported by the scientific literature (Veldhuis and Staun, 2009).

The cause identified by these theories correlates with group dynamics in the sense that the group is the perfect framework that can ensure the psychological need for a purpose (elimination of enemies accused of their own mistakes).

Perceived injustice – as a severity of pain-related loss, blame, and a sense of unfairness – is often mentioned as a determinant factor of radicalization (Doosje, Loseman, & Van den Bos, 2013; Moyano, 2014; Bazex, 2017). In most cases, individuals try to make sense of their existential failure, often caused by personal experience.

Cognitive dissonance can also play a role in the radicalization process. It refers to a mental discomfort felt when one's behavior is inconsistent with his/her personal attitudes or beliefs (Festinger, 1957). In addition, cognitive dissonance also explains the fact that the more one sacrifices himself/herself for a belief, the more he/ she will be connected to that belief. Sacrifice is common among people who join a radical group, either by abandoning past behaviors or by separating from their families (even ideologically).

Some authors also mention feelings of humiliation that contribute to the radicalization process (Stern, 2003; Juergensmeyer, 2003; Richardson, 2006; Victoroff, 2010). For example, Khosrokhavar (2005) argues for “proxy humiliation”, explaining that “terrorists feel humiliated by the fact that their Muslim counterparts are oppressed and thus retaliate as a form of objection.” (Khosrokhavar, 2005)

Another invoked psychological factor that leads to radicalization is **frustration**. Dollard argues that the frustration-aggression hypothesis

may prove very useful in explaining political violence and terrorism (Cormick, 2003). His hypothesis states that when a person's ideal is incongruous with his real achievements, then he/she becomes frustrated and violent.

Other authors have presented various factors that predispose to radicalization, such as depressive tendencies (Merari et.al., 2009; Merari, 2010; Victoroff, 2005) or identity and belonging (Echelmeyer, Slotboom & Weerman, 2023). The latter emphasizes that being a member of a radical group and embracing a cause gives a comforting, responsive feeling to the "search for meaning" (McGilloway, 2015; Mccauley C, 2008; Kruglanski, 2009). For young people that are looking for an identity, ideologies help to form identity. Joining a terrorist group can act as a "strong identity stabilizer that gives young people a sense of belonging and purpose (Dalgaard-Nielsen, 2008). In cases of psychological vulnerabilities, such as the depressive dimension with frequent feelings of despair, radicalization is seen as a solution to combat depression (Rolling, 2017).

Other studies show that suicidal intent, which could precede the radicalization process, is developed as a result of the promise of a true life in the future (Bouzar and Martin, 2016). Addictive behavior is also mentioned in the literature, as radical group addiction can act as a substitute for previous addictions, such as alcohol or banned substances (Ludot et.al., 2016).

Several authors mention the psychopathological mechanisms that strengthen the radical commitment. For example, in the case of paranoia, the psychopathological mechanism acts as a defense mechanism (Rolling, 2017; Bazex, 2017; Bouzar, 2016; Schuurman, 2016). Also, obsessive-compulsive habits are common among radicalized individuals and have a purifying function (Adam-Troian & Belanger, 2024).

Dalgaard-Nielsen (2008) examined three frameworks specific to individual psychology that could help determine the causes that lead to radicalization: psychodynamic approaches, identity theory and cognitive approaches.

The psychodynamic approaches are based on the Freudian tradition of psychoanalysis, the link between violence and past traumatic events (Dalgaard-Nielsen, 2008). The psychodynamic approaches include

narcissism theory, paranoia theory and absolutist/apocalyptic theory. These approaches suggest that early childhood experiences profoundly shape mental processes, much of which remain unconscious.

A key concept within this framework is the **narcissistic rage hypothesis**, which posits that children subjected to parental neglect fail to develop healthy self-images, mature identities, or moral frameworks² (Dalgaard-Nielsen, 2008). Moreover, paranoia theory examines how individuals manage intolerable or socially unacceptable feelings by projecting them outward. Problematic emotions are denied as part of the self and attributed to external entities, leading to an idealization of the in-group and demonization of outsiders. This paranoia, coupled with fears about the survival of the in-group, creates the psychological conditions that justify violence against perceived external threats, such as civilians (Dalgaard-Nielsen, 2008).

Absolutist and apocalyptic theories of terrorism highlight similar mechanisms, noting that terrorists often adopt uncompromising moral stances. This worldview, underpinned by psychological splitting and projection, appeals to young adults with fragile identities. Conspiracy theories about the annihilation of the in-group and the demonization of the out-group provide further psychological rationale for legitimizing violence as self-defense (Dalgaard-Nielsen, 2008).

While psychodynamic theories offer valuable insights, critics highlight their speculative nature, reliance on a priori assumptions, and lack of empirical testing. Studies in this area have been hindered by methodological issues, such as small sample sizes, limited cooperation from terrorists, and the absence of control groups, questioning the broader applicability of these theories to radicalization.

The identity theory formulated by Erik Erikson, derived from psychodynamic psychology, emphasizes the stages of identity development of young adults and the role of ideologies in shaping individual identity. Erikson states that in the process of development, young people reach a point where the adoption of ideologies contributes significantly to the

² To cope, such individuals may develop grandiose fantasies of self-exaltation or immerse themselves in a group, adopting its identity as a substitute for their damaged sense of self. In either case, the unresolved trauma fosters a strong desire to annihilate the source of the original harm, with terrorist violence emerging as a projection of this suppressed rage onto external targets.

stabilization of their identity. For example, a young person with low self-esteem caused by overly authoritarian parents may find joining a terrorist group an “identity stabilizer,” providing a sense of belonging, worth, and purpose. According to Identity Theory, joining a terrorist group can be interpreted as a form of rebellion against the traditional cultures of the parental generation, but also against the Western majority culture, providing a platform for rebellion, self-affirmation and defining identity properties. This theory emphasizes the importance of identity formation processes in understanding the dynamics of radicalization (Dalgaard-Nielsen, 2008).

Finally, according to cognitive theory, there is a potential link between cognitive style and the individual’s willingness to engage in terrorist acts (Dalgaard-Nielsen, 2008). Horgan distinguishes in his work, *The Psychology of Terrorism*, three related psychological aspects: the psychology of the becoming process, the psychology of the terrorist and the psychology of disengagement from terrorism (Horgan, 2005). The author provides several arguments. In his view, radicalization is a progressive process. The author emphasizes dissatisfaction or disillusionment with one’s own person/life, that makes the individual open to outside influences. Circumstances in which this is achieved include loss of loved ones, workplace, etc. This is called “*thawing*” in psychology, “*biographical availability*” in sociology, and “*cognitive openness*” in the theory of social movements. The idea of a cognitive openness that makes the individual vulnerable to radical influences is also mentioned in a multidisciplinary research (Campelo, Oppetit, Neau, Cohen, & Bronsar, 2018) that aimed to detect the reasons behind European adolescents and young adults having been attracted to radicalism since 2010. These results suggest that adolescent psychopathology plays a role in the radicalization process. The same study examines the interaction between adolescent mechanisms and radical influences: personal uncertainty combined with triggering events provides cognitive openings to extremist groups and ideologies that provide a purpose, a sense of belonging, and moral certainty. A three-level explanatory model (individual, micro-environment, macro-environment) is thus created including risk factors extending from adolescence to a psychiatric condition, psychological vulnerability, abandonment problems, perceived injustice, and personal uncertainty.

Contemporary scholarship has extended foundational psychological, social psychological, and psychiatric theories to better capture the complex, multifactorial nature of radicalization, which often intersects individual vulnerabilities with broader social and ideological contexts. Modern psychological approaches increasingly focus on cognitive and emotional factors that predispose individuals to radicalization, with particular attention to identity crises, perceived injustice, and socio-political grievances.

Recent studies emphasize the role of identity fusion—a psychological state in which individuals' personal and group identities become deeply intertwined, often making group interests inseparable from personal identity (Swann, Jetten, Gomez, & Whitehouse, 2012; Swann Jr. & Buhrmester, 2015). This fusion creates a potent foundation for individuals to act on behalf of their group, sometimes with extreme commitment to ideological goals. Identity fusion is often coupled with existential and psychological needs, such as the search for meaning, which can lead individuals to embrace radical ideologies that promise a purposeful path (Webber & Kruglanski, 2018; Gomez et al., 2021). Additionally, cognitive closure, or the desire for definitive answers to ambiguous or complex questions, has been linked to susceptibility to extremist ideologies, especially when individuals experience identity threats or uncertainty (Obaidi et al., 2023). Similar, some authors linked cognitive inflexibility with extremist attitudes (Zmigrod, Rentfrow, & Robbins, 2019).

Alternatively, social psychological research highlights the importance of group dynamics in shaping the radicalization process. Collective narcissism—the belief in the exaggerated greatness of one's in-group coupled with resentment toward perceived out-group threats – has been shown to intensify hostility towards perceived external threats, fueling violent radicalization (Golec de Zavala, Cichocka, & Iskra-Golec, 2013). This phenomenon is magnified within echo chambers created by social networks, both offline and online, which reinforce in-group biases and ideological convictions. Social contagion and online radicalization pathways are increasingly recognized as contributors to extremist commitments, as individuals reinforce and validate each other's grievances and narratives within virtual communities (Mughal et al., 2024; Ware, 2023).

A recent meta-analysis concerning the association between the variables of the 3N (need, narrative and network) model³ and violent extremism, indicated that the association is strong for quest of significance and low for need for significance (Da Silva, et al., 2024). The findings suggest that while most people may have a general need for significance, only those with an intense, unfulfilled drive to actively pursue it (often due to personal or social triggers) are more vulnerable to radicalization and violent extremism. This highlights that violent extremists are not just seeking meaning in an abstract sense; they are driven by a pressing, motivational force that pushes them to find meaning specifically through extreme avenues.

Advances in neuropsychology and social cognitive neuroscience have also contributed to the study of radicalization, examining how empathy deficits, moral disengagement, and biased social cognition contribute to extremist attitudes. Moral disengagement theories suggest that individuals may bypass normal ethical constraints by rationalizing violent actions, viewing them as justified or even morally superior due to perceived existential or ideological threats (Concha-Salgado, Ramirez, Perez, Perez-Luco, & Garcia-Cueto, 2022). Such mechanisms are reinforced within radical groups where in-group loyalty and ideological alignment reduce empathy for out-groups, contributing to the dehumanization of perceived enemies.

In sum, while earlier psychological and psychiatric theories focused on isolated individual traits, recent theories emphasize complex interactions between identity, cognition, social influences, and digital networks. These approaches underscore the need for an interdisciplinary framework to understand how psychological vulnerabilities and group dynamics coalesce to foster radicalization. Future research is called upon to further explore how digital radicalization pathways, particularly

³ The 3N model, developed by social psychologist Arie Kruglanski, is a framework used to understand the psychological factors that drive individuals towards violent extremism. This model identifies three core components, or “N”s, that contribute to radicalization: Need – Refers to a person’s search for personal significance or purpose. Narrative – The ideological story or belief system that justifies violent actions as a means to achieve significance. Network – The social connections that support and reinforce the narrative and behaviour.

in social media contexts, and socio-cognitive factors intersect with individual vulnerabilities, shaping a nuanced and evolving understanding of radicalization.

Mental Health Disorders that Increase Susceptibility to Radicalization

In the context of addressing psychological factors, the literature has sought to analyze the link between psychological disorders⁴ and radicalization. Recent research on the role of mental health in radicalization has shifted toward a nuanced understanding of mental health disorders as non-causal but influential factors in certain radicalization pathways.

The analysis of Misiak et al. (2019) on representative studies that examined radicalization in the context of the presence of mental health disorders revealed an association between depression and the risk of radicalization, without showing whether the problem is the level of resilience or personal vulnerability (Misiak et al., 2019). Other studies suggest that psychological distress, including depression and anxiety, can predispose individuals to extremist ideologies, particularly when compounded by social isolation and lack of social support (Corner & Gill, 2021). However, scholars caution against stigmatizing mental illness as a primary driver of radicalization, emphasizing that while psychological vulnerabilities may create susceptibility, they are rarely sufficient alone to cause violent radicalization (Bhui, Everitt, & Jones, 2014). Instead, mental health concerns can interact with socio-political grievances and identity struggles, amplifying the individual's engagement with extremist ideologies, particularly in "lone actor" contexts (Corner & Gill, 2015).

According to Campelo, psychiatric disorders are rare among radicalized youth. Bazex and Benezech found that most individuals analyzed by them have different dysfunctional personality traits without having a formal psychiatric diagnosis. Only 10% of the individuals

⁴ The Statistical Manual of Diagnosis of Mental Disorders (DSM-5) defines mental disorders as a syndrome characterized by a clinically significant disturbance in the cognition, regulation of emotions, or behaviour of an individual that reflects a dysfunction in psychological, biological, or developmental processes, underlying mental functioning (American Psychiatric Association, 2013).

studied by Bazex and Benezech were diagnosed with a psychiatric condition. The others simply displayed antisocial, obsessive, and histrionic traits (Campelo, Oppetit, Neau, Cohen, & Bronsar, 2018). However, there is evidence that mental disorders may be more prevalent, especially with regard to lone actor terrorism.

The Radicalization Awareness Network Handbook on Extremism, Radicalization and Mental Health (2019) concludes that “there is no empirical evidence to suggest that terrorism is committed primarily by the mentally ill. Wherever there is a certain relevance, it cannot be causal and, if it is partially causal, it is possible to interact with a number of political, social, environmental, situational and biological factors at any time” (RAN, 2019). Mental disorders, as a factor of radicalization, are correlated with other factors, such as: social ties, political beliefs, cultural environment (Bhui, 2018).

In conclusion, although there are indications of a possible connection between such disorders and terrorism such as lone actors, there are still not enough studies that have investigated the relationship between mental disorders and radicalization to be able to state with certainty that such a link exists. From the existing studies (O'Driscoll, 2018; Corner & Gill, 2015) there is rather a prevalence of psychological disorders in single actors compared to those who are part of terrorist groups or organizations.

Social theories of radicalization

Social theories provide crucial frameworks for understanding radicalization by examining how individuals are influenced by group dynamics, social structures, and cultural contexts. There are a number of sociological perspectives on the models and explanations of radicalization. In this sense, social relations are considered to be crucial for understanding radicalization (Echelmeyer, Slotboom, & Weerman, 2023; Christmann, 2012).

Radicalisation is a “group” phenomenon in which friends, relatives and top-down recruitment processes encourage new members to internalize the common mentality of a certain group (Christmann, 2012). Increasingly the phenomenon is viewed as a socially mediated process, often taking shape within groups that reinforce shared grievances, norms, and ideologies. The phenomenon was intensively

studied from a social movement (Kaya & Bee, 2023; Cross & Snow, 2011; Dalgaard-Nielsen, 2008; Beck, 2008) and also from a social network perspective (Chua, 2024; Kruglanski, Belanger, & Gunaratna, 2019; Perliger & Pedahzur, 2011). These studies highlight the role of social networks and social connections on radicalization processes, the individuals' interaction with the radical group and individuals' alignment with the framework of the terrorist organization, its values and convictions.

One of the foundational social theories applied to radicalization is **social movement theory**, which examines how radical ideas are spread, sustained, and mobilized within collective movements. Della Porta was the first to apply the theory of social movement (often used in social sciences) in the study of radicalization through an analysis of Italian and German militants (1995).

Recent scholarship has built upon Wiktorowicz's (2004) model, which explains radicalization through mechanisms such as cognitive openings, religious pursuits, and the construction of sacred authority (Wiktorowicz, 2004). In this framework, individuals are drawn to radical groups that provide not only ideological clarity but also a sense of purpose, belonging, and legitimacy. Building on this, researchers have emphasized the role of social media in facilitating the "leaderless jihad" model proposed by Sageman (2008), where dispersed networks enable individuals to self-radicalize and act autonomously without direct organizational control. Studies indicate that "online networks foster a *virtual caliphate* by providing decentralized support, thereby reducing dependence on traditional, hierarchical structures of terrorist organizations." (Conway, Scrivens, & Macnair, 2019)

In *Clandestine Political Violence*, della Porta (2013) sought common mechanisms for radicalizing violence⁵. She found that small cells break away from sympathizers and can become more vehement in justifying and perpetuating violence, and are more focused on preserving the unity of the group rather than sustaining the initial cause (della Porta, 2013). The motivation of the members was more related to the group than to the original cause itself.

⁵ Within four types of underground groups: Italians and left-wing Germans, right-wing Italians, basques ethnonationalists and al-Qaeda jihadists.

In the context of social theories, it is necessary to analyze the dynamics of groups because it is relevant to the interaction of the individual with the group and the individual's alignment with the framework of the terrorist group. Often, terrorist groups include people with different backgrounds, who might not normally form a group due to the existing differences between them. Given the diversity observed among radicalized people and the fact that these individuals are often easy to overlook, some researchers have tried to explain radicalization through group dynamics (McCauley & Moskalenko, 2008). Specifically, they sought to clarify why individuals join certain types of groups.

There are two main reasons why group dynamics have a significant influence on radicalization. The first is that groups satisfy (and are able to exploit) the psychological need, especially of young recruits, of finding a meaning and a purpose. Membership of a certain group and participation in its activities satisfy the "psychological search for meaning".

The second reason is that groups amplify "departure costs" once an individual has joined. Even if a person loses faith in the ideology, strategy or tactics of the group, he cannot get out easily. There will be feelings of loyalty, guilt and anxiety about returning to his previous "normal" life.

Because the dynamics of the group are not related to a particular ideology or framework, they could help clarify the important dimensions of the radicalization process applicable to different types of extremists. Such explanations also involve different strategies of case monitoring and management. Certain group behaviors identified by social psychology are relevant in this regard (Doosje, Feddes, & Mann, 2024).

This perspective suggests that social ties and intergroup relationships are critical in fostering a collective identity, a sense of solidarity, and shared goals among radicals. Recent studies, such as those by Gill et al. (2017), demonstrate that digital platforms intensify these social ties, amplifying the reach and emotional impact of radical ideologies. Radicalization is often seen as a "socially contagious" process, where individuals are drawn into extremism through direct contact with radicalized peers and through online communities that act as echo chambers, reinforcing shared grievances and ideological convictions (Binder & Kenyon, 2022). This phenomenon is especially

significant for “lone-actor” terrorists, who are increasingly shown to operate within virtual networks that offer ideological support and technical guidance without the need for physical proximity to other extremists (Elis, et al., 2016).

Polarization theory has also become essential in examining how radicalization unfolds in socially divided contexts. Social polarization refers to the process by which groups’ attitudes and beliefs become increasingly extreme as a reaction to perceived threats or injustices. In this process, people adopt rigid in-group and out-group distinctions, perceiving external groups as existential threats.

Social polarization starts from the idea that some individual opinions have the tendency to become extreme in a group context, transforming the attitude of the group into a more extreme one compared to that of individual members. In this context, Berger defines radicalization as the process of adopting increasingly negative ideas about an external group and increasing harsh action against it, which are justified (Berger, 2017).

Brandsma (2020) highlights that radicalization can often stem from the polarization of beliefs within closed social networks, where interactions with like-minded individuals fuel antagonism toward out-groups (Bradsma, 2020). Polarization is a construction of thinking based on the “us” and “them” identity hypotheses. In a process of polarization, the dominant and active narrative is related to perceived and often exaggerated simplistic differences about the others. The aspects shared by the two identities are neglected. Polarization is like the negative attitude and thinking about other groups, which can lead to increased hostility and segregation. Ultimately, this could lead to situations where intolerance turns into hate speech and even crime. In such situations, some parts of the group or individuals may radicalize, leading to violent extremism and terrorism. Polarization does not necessarily lead to radicalization, but it is one of the factors that make individuals vulnerable to extremist propaganda and recruitment. Preventing and reducing polarization can implicitly prevent radicalization (Bradsma, 2020). These divisions are exacerbated by the algorithmic nature of social media platforms, which can amplify polarized content and create feedback loops that reinforce radical ideologies (Watkin, Gerrand, & Conmay, 2022).

Recent literature explored the ways in which on-line social networks and the Internet can lead to radicalization. Most recent authors suggest that the Internet acts as an enabling environment for spreading extremist ideas (Marwick, Clancy, & Furl, 2022) or as a decision-shaping which can facilitate decision-making in association with offline factors (Ghayda, et al., 2018).

Still, few studies comprehensively examine how online environments interact with mental health to influence radicalization. Understanding these interactions is essential, especially given the rising influence of online recruitment strategies.

Reconsidering psychological, social psychological, psychiatric and social theories of radicalization

The classical literature on radicalization was initially oriented towards explaining the social, psychological and psychiatric causes of radicalization. Recent advancements in research on mental health and radicalization have illuminated many aspects of this relationship; however, significant gaps remain. We have identified the research gaps mentioned in the present section following the analysis of the research literature. Addressing these gaps is essential to deepening understanding and improving interventions. Furthermore, addressing the gaps in research surrounding radicalization and mental health significantly influence the effectiveness of practical interventions and prevention strategies. Understanding the impact of these gaps is essential for policymakers, mental health professionals, and law enforcement agencies aiming to address radicalization more effectively.

There is a need for longitudinal studies. Predominantly cross-sectional, existing research captures data at single time points, limiting insight into causation. Longitudinal studies are necessary to distinguish causative from associative factors, elucidating how mental health conditions develop and intersect with radicalization pathways over time. The predominance of cross-sectional studies limits the understanding of the causal pathways leading to radicalization. Without longitudinal data, interventions may be designed based on associations rather than causative factors, resulting in ineffective or misdirected efforts. For instance, programs that focus solely on immediate mental health issues may neglect the evolving nature of these conditions over time and their

intersection with radicalization. This limitation underscores the need for intervention strategies that are adaptable and responsive to the longitudinal development of individual mental health profiles and radicalization pathways.

Current studies often isolate mental health variables without sufficiently contextualizing them within broader sociopolitical frameworks. Further research should explore how individual vulnerabilities, such as trauma or isolation, interact with political grievances or social dynamics to facilitate radicalization. While links between depression, anxiety, and certain personality disorders and susceptibility to radicalization have been observed, the roles of conditions like PTSD, bipolar disorder, or schizophrenia are less understood. Studies should clarify how these specific disorders affect different radicalization aspects, particularly in distinguishing lone actors from group-based extremists.

Current isolation of mental health variables from broader sociopolitical contexts hinders the development of interventions that address the root causes of radicalization. For example, individuals with mental health issues may be more susceptible to radicalization when they perceive political injustices or social grievances. An in-depth analysis of the phenomenon of radicalization should explore whether it should be approached predominantly from a legal-normative, psychopathological perspective or through the prism of its finality. From a legal-normative point of view, radicalization can be understood as a significant deviation from accepted social norms, being treated as a threat to public order and managed through strict legal regulations and institutional measures. Instead, the psycho-pathological perspective approaches radicalization through the lens of individual predispositions, psychological dysfunctions or personal vulnerabilities that can facilitate the adoption of extreme beliefs or the justification of violence. On the other hand, an ends-focused approach analyzes radicalization in relation to the ends and means adopted, treating violence either as an inevitable means or as a consequence of well-defined ideological, political or social objectives. These perspectives provide a complementary interpretive framework for understanding the complexity of radicalization and the factors that contribute to its emergence. By integrating these approaches, more effective prevention and combat measures can be identified, be they

legal, psychological or socio-political, depending on the nature and context of the analyzed phenomenon. Programs that fail to integrate these broader contexts may inadvertently ignore significant factors contributing to an individual's radicalization journey, leading to interventions that lack relevance or effectiveness. Practical efforts must prioritize a holistic understanding of the individual's environment, incorporating sociopolitical grievances alongside mental health support.

Furthermore, there is a need for a distinction between ideological and psychological drivers of radicalization. The interaction between mental health disorders and ideological or environmental influences remains a debated area. Research must aim to clarify the relative impact of psychological vulnerabilities versus ideological beliefs in driving radicalization, especially among individuals with co-occurring influences.

The failure to distinguish between ideological and psychological drivers may result in interventions that do not adequately address the motivations of radicalized individuals. For instance, if practitioners presume that all radicalized individuals are driven primarily by psychological vulnerabilities, they may overlook ideological components that also play a critical role. This oversight could lead to the development of intervention strategies that address only one aspect of the radicalization process, limiting their effectiveness. A more nuanced approach that simultaneously addresses psychological vulnerabilities and ideological beliefs is necessary for creating comprehensive intervention frameworks.

Regarding psychological theories on radicalization, more empirical research is needed on which mental health traits or interventions act as protective factors against radicalization. Identifying resilience factors, such as adaptive coping skills, social support, and therapeutic interventions, could inform preventive frameworks to mitigate susceptibility to extremist ideologies. The absence of research identifying specific protective factors against radicalization hampers the ability to develop resilience-based interventions. If practitioners are unaware of which mental health traits or social supports effectively shield individuals from radicalization, they may struggle to create prevention programs that bolster resilience. This lack of knowledge may result in missed opportunities to promote adaptive coping strategies, social support networks, and community resources that could mitigate the risk of radicalization.

Furthermore, only few studies examine how mental health affects radicalization differently across genders, though differing socialization patterns and gender-specific mental health concerns may lead to varied pathways. The limited understanding of how mental health affects radicalization across genders results in interventions that may not effectively address the specific needs and vulnerabilities of different demographic groups. For example, male and female individuals may experience radicalization differently due to variations in socialization and mental health concerns. A lack of gender-sensitive approaches may lead to the development of one-size-fits-all strategies that fail to engage effectively with at-risk individuals. Understanding these dynamics could enable more tailored prevention and intervention strategies, which can enhance their relevance and effectiveness.

Additionally the theories on social networks require further updates. Social network theories aimed to explain the role of the social network in the process of radicalization, or more precisely to explain radicalization from the perspective of the social network to which individuals adhere. Although these theories are useful and the literature on this topic is consistent, they could benefit from current developments, such as the perspective of social networks⁶ that are created online. Online platforms are known to heighten mental health issues by creating echo chambers, fostering isolation, and amplifying grievances, yet few studies have assessed how these environments interact with mental health to drive radicalization. Further research is essential to address the impact of digital recruitment strategies.

As social networks evolve, particularly in digital contexts, reliance on outdated theories can lead to ineffective strategies for intervention and prevention. Online platforms have fundamentally altered how individuals connect and radicalize, yet current theories may not adequately account for these changes. Failing to integrate the dynamics of online radicalization can lead to interventions that overlook crucial avenues for engagement, such as monitoring online behaviors, understanding digital recruitment tactics, and addressing the role of echo chambers in amplifying grievances.

⁶ For example, on Telegram, V Kontakte or chatroom games that are increasingly used by radicalized people to form online radical clusters.

Radicalization theories related to group dynamics, especially those related to group thinking, in-group/out-group biases, diminished sense of responsibility, perception of rewards or benefits, group norms and rules explain the actions of people who join a terrorist group, but not those of solitary actors, who act individually. It does not mean that these theories are not valid from the perspective of lone actors. On the contrary, these actors – by declaring their affiliation with a group, although they are not actually part of that group – or by adhering to an ideology that imposes rules and regulations – come to have that sense of belonging. Evidence suggests that lone actors often exhibit higher rates of mental health disorders compared to group-affiliated extremists, yet research has not fully addressed why this disparity exists or how specific mental health profiles may influence the choice to act independently rather than within a group. This research gap may result in inadequate intervention strategies that fail to address their unique pathways to radicalization. Understanding the specific mental health factors that drive lone actors can inform more effective and targeted interventions, potentially reducing the risk of violence from individuals acting independently.

There is a need for a comprehensive study on the family and the role of families in the radicalization process, especially from the perspective of the possibility that the family is either a risk factor or a protective one in relation to radicalization. The study by Sikkens, van San, Sieckelink and de Winter (2018) showed that most parents make significant efforts to cope with the signs of radicalization of their children and do not know how to react. This study examines how parents react to their children's interest in extremist ideologies and advocates for the analysis of the influence of parental support and control in deradicalization (Sikkens, van San, Sieckelink, & de Winter, 2018). Family is a complex category and nuanced interpretations must be made distinguishing between parents and more distant relatives (aunts, cousins, etc.). Family tensions, intra-family violence, family functionality and the impact of absent or dysfunctional parents are also factors that require complex analysis. Moreover, it is necessary to analyze the sociocultural context of families and how they function in various cultural contexts. While families and communities can play protective roles, limited research exists on their role in supporting mental health interventions that reduce radicalization

risks. Research should explore how family or community-centered mental health programs could buffer against extremist recruitment, particularly among vulnerable youth.

These research gaps potentially leading to a new research agenda on the topic stems from various historical, methodological, and contextual factors. Historically, research on radicalization has predominantly centered on individual psychological and social factors, that has often marginalized the role of families and social networks, leading to a lack of comprehensive studies that consider how familial dynamics influence radicalization. Family systems are inherently complex, with varying influences from immediate family members and extended relatives. Factors such as familial relationships, intra-family communication, cultural background, and socio-economic status can all play significant roles in shaping an individual's experiences and vulnerabilities. This complexity makes it challenging for researchers to create standardized frameworks for studying family influences, resulting in a lack of clear findings.

Furthermore, families operate within diverse sociocultural contexts, and the dynamics of family life can differ significantly across cultures. Consequently, researchers may hesitate to engage deeply with family dynamics due to concerns about cultural specificity and the applicability of findings across different contexts. Research methodologies traditionally used in radicalization studies may not adequately capture the nuances of family dynamics. Quantitative methods that rely on surveys and statistical analysis may struggle to address complex interpersonal relationships and the qualitative aspects of familial influence. Consequently, qualitative research – such as interviews and case studies – may be less prevalent, leading to a gap in understanding how family dynamics affect radicalization.

Researching families, particularly in the context of radicalization, may involve sensitive issues such as parental control, familial dysfunction, or experiences of trauma. This sensitivity can create barriers for researchers in accessing families or eliciting candid responses, limiting the data available for analysis. Additionally, the stigma surrounding radicalization may lead families to be reluctant to participate in research studies.

The intersection of family dynamics with radicalization is inherently interdisciplinary, requiring insights from psychology, sociology, criminology and family studies. However, these disciplines often operate in silos,

leading to a lack of comprehensive research that encompasses the various dimensions of family influence in the context of radicalization.

The lack of comprehensive research on the role of families in the radicalization process limits the ability of practitioners to engage effectively with families as potential protective factors. Families can significantly influence an individual's susceptibility to radicalization, yet without a nuanced understanding of these dynamics, interventions may overlook critical support systems. Developing family-centered approaches that recognize the complex relationships within families can enhance intervention strategies, enabling practitioners to leverage familial support in combating radicalization.

All of the before mentioned research gaps on the interplay between mental health and radicalization have profound implications for practical interventions and preventive strategies. Addressing these research gaps will provide a nuanced understanding of the mental health and radicalization nexus, fostering more precise, evidence-based preventive and intervention measures. This has the potential to enhance the ability to identify at-risk individuals, provide appropriate support, and ultimately reduce the incidence of radicalization and extremist violence.

Conclusions

This article has revisited and synthesized foundational and contemporary theories on radicalization, drawing from social, psychological, and psychiatric perspectives to provide a more nuanced understanding of this complex phenomenon. It is clear that radicalization is not driven by a single factor but rather by an interplay of personal vulnerabilities, group dynamics and societal influences, which are further intensified by modern digital networks. Traditional theories have expanded to address the influence of identity crises, collective grievances, and cognitive vulnerabilities, while recent scholarship highlights the impact of online communities and polarized environments on fostering extremist ideologies. Despite significant progress in understanding these pathways, gaps remain, particularly in the roles of familial factors, mental health, and digital platforms. Continued

interdisciplinary research is essential to refine these theoretical models, with attention to emerging influences in a rapidly evolving social and digital landscape. Such efforts will be critical to developing targeted prevention and intervention strategies that address the root causes and diverse pathways leading to radicalization.

Psychological and psychiatric theories of radicalization remain relevant for traditional radicalization because they allow detailed analysis of the individual and psychological factors that predispose an individual to extremist ideologies. Contextualizing mental health in relation to current socio-political variables is essential, requiring clear distinctions between ideological and psychological factors of radicalization. Research should examine the role of mental health as a protective factor and explore gender differences, given that socialization processes and mental health concerns may differentially influence radicalization in men and women. In addition, the need for a comprehensive analysis of the role of the family emphasizes the importance of considering the family as either a possible risk factor or a protective one. Thus, the intersection between family dynamics and radicalization is interdisciplinary and requires insights from psychology, sociology, criminology and family studies.

Psychological, socio-psychological, social as well as psychiatric theories of the radicalization process require revision in light of new technological and contextual developments. Social media platforms, chat rooms, and gamification mechanisms have radically altered the way radicalization occurs, allowing for constant, unfiltered exposure to extremist ideologies and connecting individuals susceptible to negative influences. Social networks facilitate the formation of closed groups, favouring polarization and reinforcing beliefs through algorithms that prioritize extreme or controversial content. Also, through gamification, one can see a manipulation of behaviour and a motivation of individuals to actively participate in the distribution of radical messages, and artificial intelligence adds an additional dimension, personalizing user experiences and intensifying their vulnerabilities. These transformations require a more nuanced and integrated approach that considers new ways in which technology shapes human psychology and behaviour in the context of radicalization.

None of the theories discussed in this paper provides definite answers. No theory can explain all the processes behind radicalization, especially behind violent radicalization. But achieving clarity in defining our concepts and the proper use of guidance from the last ten years of social science theory and research can help reduce the reinvention of a problem and provide a platform to move forward.

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COMPETITIVE INTELLIGENCE

LEVERAGING COMPETITIVE INTELLIGENCE PROCESSES IN SHIPPING INDUSTRY OPERATIONS AND STRATEGY

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Abstract:

The present paper explores the role of Competitive Intelligence (CI) within the Shipping industry, focusing on strategic information gathering and analysis for decision-making and strategic planning. The study synthesizes insights from scholarly works and academic perspectives to highlight the transformative impact of CI practices on operational efficiency and competitiveness in shipping operations. Key themes include the integration of CI technology, such as Business Intelligence (BI) tools and data analytics, to optimize decision-making processes and enhance service quality in a dynamic global market.

The research also underscores the significance of diverse intelligence sources, including industry associations, government agencies, financial data providers, and academic research, in shaping CI strategies for Shipping companies. Furthermore, the discussion emphasizes the convergence of CI with geopolitical and macroeconomic analyses to inform strategic decision-making and mitigate operational risks. Overall, the paper contributes to a comprehensive understanding of CI practices and their implications for sustainable growth and resilience within the Shipping industry.

Keywords: *Competitive Intelligence, Shipping Industry, Business Intelligence, Strategic Decision-Making, Geopolitics.*

Introduction

The present academic paper represents a literature review, theorizing about Competitive Intelligence (CI) practices and how they could be applied within the shipping industry. Through an analysis of scholarly works and academic perspectives, the paper delves into the

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significance of strategic information gathering and analysis for decision-making and strategic planning in shipping operations. By synthesizing insights from various sources, including industry associations, government agencies, financial data providers, and academic research, this paper offers valuable perspectives on how shipping companies can enhance operational efficiency and competitiveness.

The literature review explores the transformative impact of CI technology, such as Business Intelligence (BI) tools and data analytics, in empowering shipping companies to leverage vast datasets and extract actionable insights. It emphasizes the role of advanced technologies in optimizing operational decision-making processes and enhancing service quality amidst a rapidly evolving global market landscape. Moreover, the discussion highlights the diverse array of intelligence sources available to shipping companies, underscoring the value of industry events organized by esteemed associations like the International Maritime Organization (IMO) and the International Chamber of Shipping (ICS) for networking and staying abreast of critical industry updates.

Looking forward, the research underscores the importance of integrating CI with geopolitical and macroeconomic analyses to inform strategic decision-making within the shipping industry. By anticipating regulatory changes, geopolitical tensions, and economic trends, companies can proactively mitigate risks and capitalize on emerging opportunities, thereby fostering long-term sustainability and growth. Overall, this paper's discussion-based research contributes to a deeper understanding of how shipping industry might utilize CI practices, shedding light on key factors driving operational efficiency, resilience, and competitiveness in shipping operations.

Competitive Intelligence Process Theory

Competitive Intelligence Definitions

The evolving dynamics of the broader macroeconomic environment pose significant challenges for business decision-making within companies (Ruhli and Sachs, 1997; Miller, 2001). Effective decision-making in this complex landscape requires a deep understanding of qualitative data specific to the business sector and its competitive dynamics (Bose, 2008; Nasri and Zarai, 2013; Kula and Naktiyok, 2021).

Perceptions within a company regarding sectorial competition undergo a rigorous scanning process aimed at securing competitive advantages (Aaker, 1983; De Almeida et al., 2016; Somiah et al., 2020). CI is pivotal in this regard, facilitating the collection, processing, and analysis of data and information critical to informed decision-making on competitors, customers, and products (Dabrowski, 2018). It involves the transfer of knowledge from the business environment to corporate entities, guided by established analytical frameworks (Tahmasebifard, 2018), which enhances comprehension of competitive landscapes (Carvalho, 2021).

Distinguishing CI from BI lies in their information sources; BI relies on internal company systems, whereas CI draws from both internal resources and extensive external data (Saxena and Lamest, 2018; Barnea, 2021). Eventually, the historical roots of competitive intelligence can be traced back to mid-20th-century military intelligence gathering (Greene, 1966). Despite subsequent developments, a universally accepted international definition of competitive intelligence remains elusive (Global Intelligence Alliance, 2005; Franco et al., 2011).

CI operates within a legally compliant framework to gather, manage, analyse, and disseminate information and intelligence that aids strategic decision-making processes in business (Amiri et al., 2017; Cavallo et al., 2020). Successful businesses base their strategies on a comprehensive awareness of the external business environment (Porter, 1991; Cloutier, 2013), emphasizing industry structure, customer behaviour, and competitor activities as primary targets for competitive intelligence frameworks. Initially, Sawka (1996) defines competitive intelligence as knowledge and foresight concerning the external operational environment that informs decision-making and provides an external overview for businesses. According to Calof (1997), the Society of Competitive Intelligence Professionals (SCIP) characterizes CI as timely, fact-based data used in decision-making and strategy development, achieved through industry and competitive analysis, and benchmarking. Moreover, Prescott (1999) extends the definition, framing CI as a process to develop actionable foresight regarding competitive dynamics and non-market factors for enhanced competitive advantage. Leibowitz (2006) views CI as a systematic program to capture, manage, and analyse intelligence for improved strategic decision-making. McGonagle and

Vella (2002) approach CI from a data-centric viewpoint, focusing on public-sourced competitor and business environment information.

Subsequently, CI serves as a value-adding process within a legal framework, ethically gathering and analysing intelligence to enhance strategic and operational decision-making (Nte et al., 2020). The core of CI lies in external environment data collection, underlining its pivotal role in strategic business decision-making (Abraham, 2012), despite the absence of a universally recognized international definition within business and academic literature.

Competitive Intelligence Process

The purpose of the CI framework, as articulated by Prescott (1999), is to develop actionable implications for managers. However, the process of effectively delivering essential information and intelligence to top management is not without challenges, as strategic decision-makers may undervalue CI analytical products and rely solely on personal knowledge and experiences (Gaidelys & Meidute, 2012; Dabrowski, 2018). CI serves as a means of disseminating available intelligence and knowledge to executives responsible for crafting business strategy (Tahmasebifard, 2018; García-Madurga & Esteban-Navarro, 2020). CI projects play a critical role in enabling decision-makers to sustain business leadership amidst a rapidly evolving business environment by identifying, confronting, and effectively managing emerging situations and uncertainties through intelligence acquisition (Barnea, 2021).

There exists a critical need for CI expertise within corporations, enabling CI executives and decision-makers to actively engage in a demand-supply CI chain. In this direction, Gelb & Zinkhan (1985) highlight CI as a combination of defensive and offensive intelligence, aimed at understanding competitors' plans, strategies, weaknesses, and opportunities. Consequently, CI should be recognized as a strategic management tool rather than a mere departmental entity (Viviers et al., 2005). The CI process begins with the collection of raw data and information for the company (Wright, 2010). CI's business environment scanning focuses on specific characteristics and regular research frequencies (De Almeida et al., 2016). Afterward, CI is derived from a comprehensive assessment of the external business environment.

This mutual interaction hinges on management's willingness to acquire knowledge about the business environment and the ability of CI practitioners to operate within a standardized CI framework (Tahmasebifard, 2018). Corporate executives consistently seek competitive intelligence, particularly in today's fiercely competitive corporate landscape.

CI is not merely a framework for data collection but a mechanism to add value to companies through intelligence processes and analysis, enabling managers to proactively make informed decisions. Porter (1991) notes that CI procedures yield either alert intelligence products, highlighting immediate and critical changes in the business macro and micro environment, or operational and strategic intelligence products that inform business strategy formulation and future decision-making. Rothberg and Erickson (2012) argue that CI effectiveness does not always require additional resources but relies on the quality and efficiency of existing analysis procedures and knowledge. Gaspareniene et al. (2013) emphasize the importance of fostering a business culture of intelligence analysis, enhancing knowledge, and ensuring business continuity regardless of potential future investments in additional resources and personnel. Comai (2016) identifies specific characteristics of CI linked to the level and type of investment a company allocates to it. Consequently, CI is a dynamic process that enhances the value of collected information through analysis and the application of CI analysts' and executives' knowledge and experience (Tahmasebifard, 2018).

Additionally, companies allocate resources to CI based on internal and external factors such as costs, information flows, and analytical capabilities. Decision-makers are key proponents of CI within businesses, valuing its contribution to business strategy and competitive intelligence, providing businesses with advanced insights into competitors' decisions. The value of CI for businesses lies in its provision of additional and pertinent intelligence that informs decision-making and strategy formulation, enabling executives to stay abreast of developments in the macro and micro business environments with timely and analytically enriched insights from CI executives (Sapkauskiene and Leitoniene, 2010). Well-informed executives draw actionable conclusions about emerging alternatives for business decisions, selecting the most cost-

effective and efficient options (David, 2013). Executives' personal styles and business cultures influence the successful planning of CI processes by facilitating effective communication among CI executive teams. Therefore, CI techniques should be integral to every decision-makers' toolkit for anticipating future developments.

Competitive Intelligence Process Cycle

The CI processes cycle encompasses the development of intelligence analysis products within specific timeframes, guided by established procedures that align with an intelligence cycle framework (Prescott, 1999; Kula and Naktiyok, 2021). The American Productivity and Quality Centre (1996) emphasizes that the intelligence cycle is a dynamic and interactive process, enabling organizations to gather data and information from diverse sources, conduct analysis, and derive actionable insights to inform decision-making. This cycle operates continuously as a daily framework, ensuring organizations stay abreast of the competitive landscape and facilitate informed decision-making processes.

Besides, Dishman and Calof's (2008) research underscores that the intelligence cycle framework is contingent upon CI awareness and structure. "CI awareness" denotes the necessity for a conducive analytical and operational culture that supports effective information management methodologies within the organization (Gaspareniene et al., 2013). Through fostering a CI business culture, company executives serve as primary stakeholders in information collection, management, and analysis, enabling comprehensive data availability for thorough analysis and decision-making support (David, 2013). As well, The Global Intelligence Alliance (2004) proposes an eight-step CI cycle based on the approaches of Bernhardt (1994), Hussey (1995), and Kahaner (1996). Brummer (2005) and Botha and Boon (2008) delineate a seven-step CI cycle that prioritizes key intelligence topics tailored to business-specific competitive intelligence requirements. Bose (2008) aligns with the Competitive Intelligence Professionals (SCIP) CI Cycle, structured around five distinct phases. Additionally, Cloutier et al. (2013), drawing on the work of Kahaner (1996), Bose (2008), and Saayman (2008), advocate for a six-step CI cycle comprising planning and direction,

collection, analysis, communication, decision, and evaluation processes. These approaches underscore the systematic and multifaceted nature of CI cycles designed to enhance organizational intelligence and strategic decision-making capabilities.

Shipping Business Environment

The global shipping trade plays a crucial role in driving globalization by facilitating communication and collaboration among regional economies (Grammenos, 2010; Španja et al., 2017). This industry not only grows faster than the world's GDP but also provides services and components essential to other production sectors (Grammenos, 2010). The increased utilization of ships, the dynamic development of global supply chain systems, and the emergence of international trade agreements between states and corporations have collectively contributed to the globalization of the Shipping industry (Alizadeh and Nomikos, 2009). Adam Smith, widely regarded as the father of modern economics, extolled shipping in "The Wealth of Nations" as a fundamental cornerstone of global economic development, citing its benefits to international trade systems and its role in fostering competition, specialization, and efficiency in the world economy. Conversely, Stopford (1999) explores the impact of globalization on the shipping industry in "Maritime Economics," discussing its effects on company competitiveness through rapid technological advancements and evolving economic and business environments.

Focusing on a single industry allows for in-depth research into the unique business and environmental conditions and factors characterizing that specific business category. Spanos et al. (2004) note that high-profit industries often feature highly competitive environments and business structures. The shipping industry, known for its profitability, is characterized by intense competition, with numerous companies vying for market share (Giannakopoulou et al., 2016). Shipping companies consistently endeavour to reduce costs, enhance services, and deliver trade and service value to maintain competitiveness (Akbar et al., 2020). Moreover, the shipping industry is continuously evolving technologically and is subject to new laws and environmental regulations. Companies

must adapt to these changes to sustain their competitive positions (Alizadeh and Nomikos, 2009).

Given these factors and the need to respond to emerging conditions in the broader macro environment, the shipping industry increasingly leverages intelligence practices to enhance decision-making efficiency, reduce operational costs, and improve trade system safety. Intelligence activities are integrated into daily shipping operations through innovative technological tools that gather and analyse large volumes of data, as well as through structured intelligence frameworks that utilize internal and external business information and intelligence (Lorange, 2020; Ward and Bjørn-Andersen, 2020). Modern shipping companies actively seek methods to acquire information and intelligence about their operational environments to enable predictive insights (Zehir et al., 2010).

Shipping Strategic Decision-Making

The continuous liquidity of the shipping industry and the frequent structural changes it undergoes necessitate careful consideration when applying macroeconomic analysis models. Competitive strategies adopted by shipping companies are heavily influenced by their business environments (Panayides, 2003). It is imperative for companies to remain informed of significant developments and to demonstrate agility in decision-making and implementation to effectively capitalize on emerging opportunities and ensure resilience. Key pillars for developing a shipping strategy include strategic timing in market positioning and proactive exploitation of shipping cyclicalities by identifying market inefficiencies and inconsistencies (Grammenos, 2010; Emmanuelides and Tsavloris, 2019).

Strategic decisions in the shipping industry involve capital acquisition considerations with planning horizons extending up to twenty years. These decisions translate into tactical objectives encompassing vessel allocation management, chartering, operations, and market negotiation positioning. The timing of strategic decisions in the shipping industry is critical due to the fluctuating profit potentials along business cycles (Grammenos, 2010). The value of ships as economic assets undergoes rapid changes, significantly impacting

macroeconomic potentials. Therefore, shipping companies often base their strategies on countercyclical investment approaches, investing against prevailing shipping cycle trends (Bendall and Stent, 2007). This approach can involve asset play strategies supported by financial resources and banking finance to reshape or expand shipping fleets (Grammenos, 2010).

Furthermore, aggressive exploitation of shipping cyclicalities and market inefficiencies underscores the value of intelligence in the industry. Effective intelligence gathering and utilization can lead to geopolitical insights, the emergence of new trade routes, and predictions regarding new products and transportation methods (Charalambides et al., 2019). The availability of financial resources and political backing can contribute to the formation of oligopolistic segments within the shipping industry. Ship-owners who possess priority, flexibility, and readiness to seize opportunities can derive substantial benefits (Emmanuelides and Tsavlis, 2019).

Business Intelligence in the Shipping Industry

Modern technology plays a pivotal role in the operations of shipping companies, facilitating essential functions such as information storage, processing, and communication. The quality and effectiveness of intelligence disseminated to decision-making management levels within these companies are heavily reliant on the sophistication and capabilities of the technological tools employed (Lyridis, 2005).

In addition, BI technologies serve as a critical enabler for CI teams and executives. It assists them in ensuring that the data and information gathered are not only comprehensive but also accurately aligned with the specific requirements for intelligence products intended for dissemination to mid or high-level management (Carvalho, 2021). The horizon and efficiency of intelligence production can significantly fluctuate depending on the quality, reliability, and timeliness of the gathered information (Gaspareniene et al., 2013).

In the context of the shipping business, where rapid decision-making and strategic planning are paramount, leveraging advanced technologies such as data analytics, artificial intelligence, and cloud computing becomes imperative. These technologies empower shipping

companies to harness vast amounts of data, extract actionable insights, and enhance their overall competitiveness in a dynamic global market. Furthermore, the integration of BI and CI technologies not only streamlines information management but also enables a more proactive approach to identifying market trends, competitive threats, and emerging opportunities. This proactive stance is crucial for shipping companies seeking to adapt swiftly to changing market conditions and maintain a strategic edge.

Competitive Intelligence in the Shipping Industry

CI, at least according to the theoretical works, operates within a legal framework designed to ethically collect, manage, analyze, and disseminate information and intelligence to support decision-making processes and business strategy formulation within organizations. Within the context of the shipping industry, CI encompasses the collection and analysis of information about business competitors in the corporate environment. The primary objective of CI within the shipping industry is to facilitate effective strategic planning and, consequently, evolve into a key strategic decision-making tool.

Numerous competitive technology intelligence tools and algorithms have been developed specifically for CI intelligence cycle procedures. These tools typically follow a set of generic steps consisting of six main procedures: intelligence need identification, resource and task planning, data and intelligence acquisition, analytical framework implementation, dissemination to mid and high-level management, and feedback monitoring post-decision-making (Global Intelligence Alliance, 2005). The international structure of the shipping industry, coupled with existing collaborations through shipping clubs, provides a wealth of competitive information that can be effectively utilized within the CI framework. Moreover, the governance of information resources plays a critical role in enabling proper decision-making within the shipping industry. CI resources can be aligned with the goals of shipping company stakeholders to generate high-value results in the intelligence analysis process (Boyer et al., 2010).

In broad international business environments like shipping, many scholars propose the adoption of specific CI project processes tailored to

internal business structures, staffed with practitioners and executives possessing defined qualifications and business experience. This approach enables a more comprehensive, expedient, and dynamic understanding of the business environment (Global Intelligence Alliance, 2005; García-Madurga, and Esteban-Navarro, 2020).

Shipping Competitive Intelligence sources

The exploration of various sources and channels reveals how shipping companies can acquire valuable intelligence about market trends, regulatory changes, competitor activities, and customer preferences. By leveraging market reports, industry publications, trade associations, government agencies, financial data providers, supplier relationships, digital platforms, customer feedback, competitive benchmarking, and academic research, shipping companies can develop a comprehensive understanding of the shipping landscape. Harnessing these diverse sources of intelligence enables organizations to enhance operational efficiency, optimize decision-making processes, and capitalize on emerging opportunities in the ever-evolving shipping industry. This investigation delves into each intelligence source, highlighting their significance and practical applications for shipping companies navigating the complexities of global maritime trade. The key sources are as follows:

- *Market Reports and Industry Publications:* Represent indispensable resources for shipping companies seeking to navigate the complex maritime and logistics sectors. Subscription-based market research reports, crafted by reputable firms specializing in these fields, provide deep insights into market trends, growth projections, and competitive landscapes. These reports furnish essential data and analysis that empower shipping companies to grasp market dynamics and make strategic decisions with confidence (Gao et al., 2021). Moreover, industry publications and journals serve as ongoing sources of knowledge, delivering timely updates on regulatory changes, technological advancements, and shifting trade patterns that directly influence the shipping industry. By staying informed through these publications, shipping companies can proactively respond to market

shifts, adapt to regulatory requirements, harness emerging technologies, and position themselves competitively within the global shipping arena (Yang et al., 2021).

- *Associations and Industry Conferences:* They play a pivotal role in the networking and knowledge-sharing efforts of shipping companies. Participating in industry-specific events such as conferences, seminars, and trade shows organized by esteemed associations like the International Maritime Organization (IMO), International Chamber of Shipping (ICS), and Baltic and International Maritime Council (BIMCO) provides invaluable opportunities to connect with industry experts, peers, and competitors (Lyll, 2022; Rowbotham, 2022). These interactions enable companies to stay abreast of emerging trends, best practices, and regulatory updates within the maritime sector. Additionally, trade associations frequently publish newsletters and research papers that delve into critical issues affecting shipping companies, offering insights into market conditions, policy developments, and technological innovations (Duru, 2018).
- *Government and Regulatory Agencies:* Government and regulatory agencies, such as the European Maritime Safety Agency, play a crucial role in shaping the operational landscape of shipping companies through the issuance of regulatory updates and compliance guidelines (Power, 2018). Accessing and staying informed about these updates is essential for shipping companies to navigate changes in international shipping laws, environmental regulations, and port security measures effectively. By monitoring regulatory developments, companies can ensure compliance with evolving standards and requirements, mitigate operational risks, and adapt their strategies to align with emerging regulatory frameworks. The insights provided by government and regulatory agencies enable shipping companies to maintain operational efficiency, uphold safety standards, and foster sustainable practices in the evolving regulatory environment within the Shipping industry (Heims, 2018).

- *Finance and Market Data Providers:* Utilizing financial databases and market intelligence platforms like Bloomberg, Thomson Reuters, and Lloyd's List Intelligence empowers shipping companies to access critical financial and market data for strategic decision-making. These platforms enable companies to track the financial performance metrics of competitors, analyse vessel ownership structures, and monitor fluctuations in freight rates. By leveraging such comprehensive databases, shipping companies can gain insights into market trends, identify emerging opportunities, and assess the competitive landscape within the shipping industry. The use of financial and market data providers facilitates informed decision-making processes, supports risk assessment and management, and enhances the overall competitiveness of shipping companies in a dynamic and evolving global market (Fei and Caesar, 2018).
- *Supplier and Partner Relationships:* Developing strategic partnerships with suppliers, shipping agents, and port operators plays a vital role in enhancing competitive intelligence within the shipping industry. By fostering these relationships, shipping companies gain access to valuable insider information about market demand, supply chain dynamics, and competitor activities. Collaborative initiatives with industry stakeholders facilitate knowledge-sharing and provide deeper insights into market trends and emerging challenges. This exchange of information and expertise enhances visibility across the shipping ecosystem, enabling companies to adapt quickly to market shifts, optimize supply chain operations, and identify strategic opportunities for growth and efficiency. Supplier and partner relationships are instrumental in building resilience and competitiveness within the maritime sector, driving innovation, and fostering long-term sustainability (Yuen et al., 2020).
- *Online Databases and Digital Platforms:* Online databases and digital platforms offer Shipping companies powerful tools

to gather real-time intelligence and optimize operational decision-making. Leveraging platforms like AIS (Automatic Identification System) and vessel tracking services such as MarineTraffic and VesselFinder provides immediate access to critical data on vessel movements, port calls, and congestion levels. By analysing publicly available shipping schedules and cargo manifests, companies can identify key trade routes, monitor shipping volumes, and assess market share dynamics. This wealth of information enables shipping businesses to make informed decisions about route planning, resource allocation, and fleet management, ultimately enhancing efficiency and competitiveness in the global shipping industry. Digital platforms streamline data collection and analysis processes, allowing companies to stay agile and responsive in a rapidly evolving maritime landscape (Jović et al., 2022).

- *Customer Feedback and Market Surveys:* Customer feedback and market surveys play a vital role in shaping the strategies and services of shipping companies. By actively soliciting feedback from customers, freight forwarders, and cargo owners through surveys and interviews, shipping companies gain valuable insights into customer preferences, pain points, and service expectations. Analysing customer sentiment and behaviour allows companies to identify areas for improvement and innovation, enabling them to tailor their services to meet specific customer needs and enhance overall satisfaction. This customer-centric approach not only fosters stronger relationships with clients but also helps shipping companies differentiate themselves in a competitive market by delivering value-added solutions that address customer concerns and deliver superior experiences (Yuen, 2015a).
- *Competitive Benchmarking and Analysis:* These procedures are essential components of strategic intelligence for shipping companies. By conducting comparative assessments against peer companies using online tools and databases, shipping companies can gain valuable insights into their performance metrics, such as vessel utilization rates, transit

times, and service quality. This benchmarking process allows companies to identify areas of strength and weakness relative to competitors, enabling targeted improvements and optimizations. Moreover, monitoring competitor advertising, promotions, and pricing strategies provides valuable intelligence on market positioning and customer targeting strategies. Understanding how competitors position themselves and attract customers allows shipping companies to refine their marketing tactics and competitive strategies to better capture market share and sustain long-term growth. Overall, competitive benchmarking and analysis empower shipping companies to make informed decisions, enhance operational efficiency, and stay ahead in a dynamic and competitive industry landscape (Krishnamoorthy, 2014).

- *Academic Research and Thought Leadership:* Academic research and thought leadership, including participation in conferences and special academic meetings, play a crucial role in shaping strategic intelligence within the Shipping industry. By referencing academic studies, white papers, and industry reports authored by renowned researchers and consulting firms, and by actively engaging in conferences and academic gatherings, shipping companies can gain valuable insights into macroeconomic trends, supply chain disruptions, and emerging technologies that impact the sector. These sources provide in-depth analysis and thought-provoking perspectives on key industry issues, enabling shipping companies to anticipate changes, adapt strategies, and capitalize on opportunities. Leveraging academic research and thought leadership, alongside participation in conferences and specialized academic meetings, fosters a deeper understanding of complex challenges and trends, equipping companies with the knowledge needed to navigate the evolving landscape of global maritime trade effectively. Ultimately, integrating insights from academic sources and engaging in academic forums enhances decision-making processes and facilitates innovation within the shipping industry (Harvey et al., 2021).

Discussion over Future potentials

The future potential of Competitive Intelligence (CI) frameworks in the shipping industry is set to revolutionize decision-making by enabling companies to effectively mitigate risks and navigate unexpected market disruptions, often described as “black swans.” The 2021 Suez Canal blockage and the ongoing Houthi attacks in the Gulf of Aden during the 2023-2024 period are key examples of how such disruptions can significantly impact global trade.

The grounding of the *Ever Given* in the Suez Canal, which halted nearly 12% of global trade, led to widespread delays, financial losses, and the rerouting of numerous ships. Similarly, the Houthi attacks in the Gulf of Aden have disrupted vital Shipping lanes, jeopardized vessel safety, and increased maritime security costs. These events highlight the critical role of CI in helping Shipping companies anticipate, understand, and respond to unpredictable yet highly impactful disruptions.

CI frameworks allow shipping companies to assess and anticipate geopolitical and geostrategic dynamics, which are often the root causes of such disruptions. By leveraging intelligence from government agencies, industry associations, and geopolitical experts, shipping firms can proactively develop strategies to mitigate risks associated with geopolitical shifts, ensuring operational continuity and regulatory compliance. The lessons from the Suez Canal blockage and Houthi attacks emphasize that CI is not just for competitive analysis but is also essential for safeguarding against unforeseen geopolitical events that can disrupt global trade routes and logistics networks.

In addition to geopolitical intelligence, integrating macroeconomic benchmarking into CI practices enhances strategic decision-making in the Shipping industry. Real-time market data and financial insights from reputable sources like Bloomberg and Thomson Reuters enable Shipping companies to monitor economic indicators, currency fluctuations, and commodity prices. This macroeconomic intelligence is crucial for informing fleet management strategies, investment decisions, and market positioning, allowing shipping companies to swiftly adapt to changing economic conditions and capitalize on emerging opportunities. The Suez Canal and Gulf of Aden incidents reinforce the need for CI frameworks

that can integrate both macroeconomic and geopolitical intelligence to effectively respond to crises and market black swans.

Looking ahead, the convergence of CI with political, geostrategic, and macroeconomic analyses will enhance operational efficiency and resilience within the Shipping industry. By anticipating regulatory changes, geopolitical tensions, and economic trends through CI-driven strategies, shipping companies can implement proactive risk management measures and strategically position themselves in the global Shipping landscape. The Suez Canal blockage and Gulf of Aden conflicts serve as case studies that illustrate the necessity of such foresight, proving that companies capable of anticipating and responding to these challenges will be better equipped to maintain operational continuity and competitive advantage.

Furthermore, integrating CI frameworks into shipping operations helps companies navigate political uncertainties, including shifts in international trade agreements and regional conflicts that affect shipping routes and port operations. By incorporating geopolitical intelligence into CI processes, shipping firms can identify potential risks and opportunities related to political events and regulatory changes, enabling them to develop agile responses that ensure business continuity, even in the face of black swan events.

Finally, utilizing macroeconomic benchmarking within CI practices provides shipping companies with valuable insights into market trends and economic indicators. Monitoring key metrics such as GDP growth rates, inflation rates, and global trade volumes enables shipping companies to make informed decisions about capacity planning, investment allocations, and pricing strategies. This comprehensive understanding of macroeconomic conditions is vital for proactive adaptation to changing market dynamics, helping shipping companies maintain competitiveness in the global marketplace. The events in the Suez Canal and Gulf of Aden underscore the importance of integrating these elements into CI frameworks, demonstrating that robust CI practices are essential for preparing for and responding to the multifaceted challenges of the global economy, including unpredictable black swans that can reshape the industry landscape.

Conclusions

Summing up, the academic discourse on CI within the shipping industry underscores the critical role of strategic information gathering and analysis in navigating the complex and dynamic maritime landscape. By leveraging various intelligence sources such as industry conferences, government agencies, financial data providers, and academic research, shipping companies can enhance their decision-making processes and maintain competitiveness.

The integration of advanced technologies, data analytics, and artificial intelligence could empower shipping companies to harness large volumes of data, extract actionable insights, and adapt swiftly to market shifts. By embracing a proactive approach to CI, companies can anticipate geopolitical and macroeconomic trends, mitigate operational risks, and capitalize on emerging opportunities.

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**INTELLIGENCE, SECURITY
AND INTERDISCIPLINARITY**

THE TRANSFORMATIONAL EVOLUTION OF THE ROMANIAN INTELLIGENCE SERVICE-SRI IN THE LIGHT OF THE SECURITY SECTOR REFORM

Iulia-Mihaela DRĂGAN*

Motto: "Patria a priori!"

Abstract:

The importance of the security sector reforms in Europe became significant with the collapse of the communist bloc at the end of 1989 in relation to the need to implement democratic instruments. At the same time, until now, the implications of the reforms of the intelligence sector, are being discussed by virtue of the need to quickly adapt to the requirements of the security environment and the dynamics of threats at the international level. For Romania, the reform of the intelligence sector was one of the most pressing needs following the collapse of the communist regime and the establishment of a new intelligence service, the Romanian Intelligence Service (SRI), so that in less than thirty years, Romania will be represented in the intelligence community by one of the most performing and prestigious intelligence services at the international level. Therefore, this article analyses the applicability of the theory of security sector reform, in relation to the evolution of the transformations achieved within the Romanian Intelligence Service. As the intelligence services represent a category of the core actors of the security sector in a state, this article aims to gradually evaluate the implementation of the reform attributes using a methodology based on the analysis of activity reports and relevant public documents, starting from the establishment of SRI to present. Complementary, with regards to the public interest, the purpose of the article is to increase the awareness of civil society in the intelligence sector, by dismantling the conspiratorial narrative and highlighting the risks generated by the assimilation of disinformation elements aimed at the service's activity, while also highlighting the transformational evolution of the Romanian Intelligence Service regarding the elements of democratization.

Keywords: *security sector reform, awareness, conspiracy and risks, Romanian Intelligence Service, transformational evolution.*

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Introduction

The intelligence services of a democratic state represent one of the essential pillars of the security sector, and equally, respecting the rigors of democratic control, the rule of law and the principle of responsibility in the intelligence activity, they contribute decisively to the consolidation of the security architecture's functionality at the national level (DCAF, 2017). Any democratic intelligence service must ensure the balance between respecting the rights and freedoms of citizens and the principles of legality and proportionality in the activity of intelligence gathering. Also, a democratic intelligence service must achieve a constant balance between transparency measures regarding the public interest of the citizens, taking into consideration the "need to know" principle (Knipet *al.*, 2023) and the preservation of the confidentiality of aspects related to the secrecy of the intelligence activity (DCAF, 2017). The Romanian Intelligence Service-SRI, established on March 26, 1990, is in the third decade of its evolution, being one of the most transformed and regenerated institutions at the national level, a fact that also highlights the degree of democratization and alignment with European values. Moreover, this fact emphasizes SRI's professionalism, the main body with attributions in the field of national security, as representing one of the most prestigious intelligence services at the European and international level (SRI Monograph, 2015, p.42-44).

The premise of the article starts from the fact that the measures of public interest that are brought to the knowledge of the civil society by the intelligence sector must be perceived and understood by the public as being carried out for the benefit of the community in order to accelerate the efficiency of the intelligence activity, not against the interest of the civil society, as it is portrayed by the conspiracy narratives. Both in practice and in the academic environment, the particular importance of the involvement and contribution of civil society to the efficiency of the intelligence sector has been emphasized. And last but not least, a strong and resilient state implies a healthy design and a credible image of the intelligence services, portrayed in the perception of civil society, based on the avoidance of vulnerabilities at

the societal level that can be created as a result of a reduced degree of trust (Filip and Ștefureac, 2011, p. 713).

However, certain aspects related to the understanding of the specificity of the mission and the values of the Romanian Intelligence Service are closely related to the consolidation of the level of security culture, a fact that will be discussed in this article. The novelty of this research resides in an analysis that comprehensively discusses the actuality of the progress and changes that gradually characterize the reform of the Romanian Intelligence Service, including, also, the third decade of the Service's existence. The purpose of this article is to increase the awareness of the civil society regarding the segment of the activity of the Romanian Intelligence Service that presents elements of public interest, by following the intelligence sector reform criteria, such as: strengthening transparency measures over time and the relationship with citizens; the effectiveness of the Parliament's democratic control over the Service; as well as the oversight of legality and democratic principles.

In this sense, in order to fulfil the research objective, the paper aims to respond to the following research questions: How was each phase of the evolution of the Romanian Intelligence Service characterized regarding the implementation of the intelligence sector reform criteria? With regard to public interest, is it possible to identify challenges in the form of elements that erode the degree of trust of the civil society in the Romanian Intelligence Service's reforms? If yes, what is the relation between the conspiratorial narratives surrounding the Romanian intelligence reform and the risks generated for the civil society?

In order to enrich the product of the analysis, a subsequent objective is to analyse the intelligence reform criteria implemented by the Romanian Intelligence Service in comparison with other European intelligence services that share a communist background, by looking at criteria such as measures to make the activity more transparent, the relationship with citizens and the criterion of structural autonomy acquired as a result of democratization. Therefore, the comparative analysis would highlight SRI's evolution determined by the implementation of the democratic criteria in contrast with other intelligence institutions, starting from a common historical criterion: the collapse of the communist

regime. The research paradigm was based on text analysis of SRI's activity reports, as well as other public documents such as the Service's public releases and the Monograph of SRI. The elements that were followed in order to respond to the research questions were the criteria proposed by the theory of the security sector reform (SSR).

Thus, one criterion of the intelligence reform follows the respect of the rights and freedoms of citizens in carrying out the activity of intelligence gathering in accordance with the good practices of the intelligence community. Similarly, other criteria refer to the conditions provided by the SSR theory such as: the need for the intelligence service to exercise its mission within the limits of the competence provided by the national legal framework (rule of law), or to have its activity subjected to accountability and to ensure the transparency of the implemented measures that have an object of public interest – budget, requests for information of public interest, (Geneva, DCAF, 2017), as well as to consolidate the cooperation with other intelligence services at the international level in order to enrich the good practices. The SSR theory also provides another set of instruments to understand the implementation, evaluation and modernization of the intelligence reforms, considering the levels of fulfilling the reforms. Therefore, three fundamental levels are at work in the activity of the intelligence services: the strategic, the organizational and the operational level.

The strategic level refers to the adoption of a democratic legislative framework for intelligence services to base their activity on, ensuring the transparency of national security policies and strategies, guaranteeing the political and financial independence of the oversight body of the intelligence services and providing a high degree of accountability through the media and civil society's role, as subsidiary control mechanisms, in addition to the parliamentary ones (DCAF, 2019). The organizational level is represented by the necessity to strengthen the mechanisms of internal control applicable to the activity of intelligence services, related to the prevalence of regulations, codes of conduct, standards of disciplinary sanctions, as well as to ensure a high level of performance by streamlining the allocation of financial, human and technological resources and perfecting recruitment criteria. Last, but not

least, the operational level is characterized by perfecting the reforms in terms of improving mechanisms to control the activity of the intelligence services, improving the practices and rules that emphasize respect for human rights and govern the principles of legality in carrying out the intelligence activity, and strengthening the efficiency of the intelligence services by training and equipping the staff and providing the logistical support necessary for the activity (DCAF, 2019). Therefore, the utility of this research lies in the contribution brought to the enrichment of the security culture at the national level by identifying clear examples of the evolution of the reforms perfected over time considering the intelligence activity in Romania.

The theoretical framework

The theory of security sector reform (SSR) describes a process of implementation and evaluation, as well as monitoring coordinated by national authorities, with the aim of ensuring the state of security, carried out responsibly and in a non-discriminatory manner, by respecting human rights and by applying legal principles (Schnabel and Farr, 2012, p. 50). Moreover, the applicability of this theory is understood in the form of coordinating a process of democratization of the main pillars that build up the security sector in a state, as well as a process of peace consolidation in the case of fragile states or a component of the post-conflict reconstruction process in the case of states affected by violence, internal conflicts, or wars (Gindarsah, 2015, p. 10-11). Another definition emphasizes the importance of SSR in the sense of a wide set of measures, including political ones, arranged in the long term with the objective of supporting social change by building the capacities and resilience of the pillar institutions of the security sector with the aim of stabilizing the good governance of insurance security in the state or modernizing traditional institutions (Bleiker and Krupanski, 2012, p. 49-51).

Another essential characteristic of the SSR is that the implementation and success of the reform of the security sector needs to be evaluated according to the geostrategic context, local specificities, and historical, cultural, and political background, in which sense the particularities of the process of reforming the security sector will present different

elements from case to case (DCAF, 2019). At the same time, in a more comprehensive sense, SSR does not focus exclusively on the avoidance of violence and armed conflict eroded by corruption and a weak functioning of the justice system in a state (Wulf, 2004), but in a broader concept also includes the “human security” dimension in the sense of preventing and combating traditional security threats – social, environmental, military, economic – (UNDP, 1994). Related to this interpretation, a characteristic of this transformation process of the security sector is extrapolated in the form of focusing on the needs of the civilian population, respecting human rights and freedoms, and prioritizing individual security.

One of the first approaches to the theory of reforming the security sector brought to the fore the implementation directions, in the sense of the need to transform the components of the security sector, such as the law enforcement apparatus, the intelligence services, the institutions that ensure the management of civil society, and the empowered civil institutions to control the security sector as well as private security services (UN, 2008). However, recent approaches to SSR theory have included a holistic, much more diversified range, including all the actors involved in the security sector, in terms of classifying them into core actors (military forces, police, security forces and protection of officials, intelligence services), the management and control apparatus (the executive and advisory body in national security issues, the legislative body, the ministries of defence, internal affairs, as well as the ministry of finance that manages the public budget), the justice system empowered to manage the principle of the “rule of law” (ministry of justice, probation bodies, courts, prosecutor’s offices and bodies specialized in monitoring the protection of citizens’ rights and freedoms), as well as non-state security forces (Schnabel and Born, 2011, p. 10).

Related to the previously described competence of the security sector, the directions for the implementation and consolidation of the reforms for each category of actors are deduced as a consequence, pursuing objectives such as: building an efficient security sector by restructuring or creating the human and material capacities necessary for competent operational actors, ensuring democratic and civilian control of the security sector in order to avoid excess power and totalitarian tendencies by strengthening the role of ministries, parliament and civil

society in the areas of action of the security sector, as well as the development of national security strategies and policies, including directions and democratic principles in order to coordinate the main institutions empowered in the field of national security (Schnabel and Farr, 2012, p. 52). In this sense, the fundamental principles that govern the implementation of the SSR theory are emphasized, such as prioritizing the good of the population, focusing on people and the security of the individual, preserving democratic norms, respecting the rights and freedoms of citizens, and upholding the rule of law. The principles that follow must be implemented and ensured at a practical level, not only in a declarative sense.

Also, another set of fundamental principles aims to incorporate the pillars of good governance through the prevalence of transparency in the activities of the institutions involved in the security sector and the prioritization of responsibility by ensuring control mechanisms and civilian supervision of the management of the activities by the national security institutions. Moreover, the involvement of civil society in order to bring to fruition the principles of transparency and accountability is crucial, ensuring the institutional transformation of the security sector and consequently leading to high performance and strengthening the legitimacy and credibility of the security sector's functioning efficiency (Schnabel and Farr, 2012, p. 52). The applicability of the rule of law principle consists in the systematic participation of civil society in the decision-making process, as well as transparent and accessible mechanisms in the legislative process, equality before the law, and its supremacy.

Moreover, the subsidiary ramifications of this principle present implications for the security sector not only regarding the reform of the justice system and the legislative system in the elaboration of directions, but also regarding economic development, the democratization of intelligence services by prioritizing the legality of the measures adopted in intelligence activity, respect for human rights, and the existence of civil control mechanisms (Bleiker and Krupanski, 2012, p. 31). Also, with regard to the activity of intelligence services, the meanings of the rule of law principle should not be viewed simply through the lens of the existence of civil control mechanisms, guaranteeing transparency and the prevalence of citizens' interests, but also from the perspective of its applicability in counter-terrorism, with the aim of identifying and

combating the roots of extremism (Bleiker and Krupanski, 2012, p. 25). Therefore, the applicability of the rule of law principle is to be approached from multiple perspectives in a holistic manner through the existence of a vertical dimension, which includes measures to make the activity transparent, emphasizing the role of civil society regarding the legitimacy of the security sector, and guaranteeing their rights and freedoms, but also the horizontal dimension, which includes the exercise of control over the activity of the security sector and compliance with the principle of responsibility in the manner of managing the coordination of the security sector (Bleiker and Krupanski, 2012).

Considering that the research topic of this article is based on the analysis of the implementation of SSR in the case of an intelligence service, it is necessary to bring into discussion the fundamental indicators and conditions of SSR in relation to their specific applicability within the framework of intelligence services as core actors of the state's security sector. Also, in a broader sense, the dimensions of achieving the reform of the intelligence services, as well as the supervision of their modernization and democratization, include three dimensions: the vertical dimension, the horizontal dimension (Caparini, 2016), the dimension of international bodies such as the ECHR or the Ombudsman (Born and Leigh, 2007). At the same time, according to another approach, the supervision of intelligence services includes, in addition to parliamentary control, four other dimensions for evaluating efficiency, such as: internal control carried out at the institutional level in order to evaluate performance; judicial control undertaken by national or international courts; executive control carried out in subsidiaries of responsible ministries; as well as external control carried out by the media and civil society (Law, 2006). On the other hand, according to another perspective, the supervision of intelligence services in order to comply with SSR criteria such as transparency, civil society participation, responsibility, rule of law (Schabel and Born, 2011) should be conducted in terms of: financial supervision, supervision of information collection, control of the legality of technical supervision, the use of personal data and the restriction of citizen rights, supervision of the exchange of information, as well as the management of complaints, towards the intelligence services (Born and Wills, 2012).

Given the aspects presented above, this article aims at presenting and analysing qualitative indicators to answer the research questions, which represent fundamental SSR criteria such as the principle of activity transparency, the principle of responsibility, respect for civil rights and freedoms, the prevalence of the rule of law, as well as the principle of participation and relationship with citizens. Also, another essential indicator to be qualitatively evaluated is the international cooperation in the field of intelligence. At the same time, the dimensions of control and supervision of the activity conducted by the intelligence services are to be approached through the lens of the dimensions and levels presented previously, to the extent to which they are applicable in Romania.

The elements of this theory find their applicability for the intelligence sector in Romania in the form of the need for the democratization of the intelligence services, which arose after the fall of the communist regime in 1989. In this sense, beginning with 1990 the security sector was restructured through the implementation of principles such as legality, the rule of law, as well as through the drafting of national security policies and strategies in order to ensure the effectiveness of the functioning of security actors in the state in a democratic manner. The communist context prior to 1989 contributed to the creation of national traumas at the level of civil society, i.e. the lack of democratic means in the operations conducted by Securitate, the main intelligence gathering body at that time. The methods employed by Securitate as an instrument of the communist state were characterized by gross violations of human rights and freedoms, the restriction of rights through the use of illegal and unjustified methods of surveillance in order to preserve political power, political police activities and torture, combined with the arrest of civilians in communist prisons on political grounds, all of which are considered to be features of a totalitarian regime (Zulean and Stan, 2018, p. 302-303).

The turning point was the collapse of the communist regime and the complete dissolution of Securitate in 1989, followed by the need to create in 1990, a new intelligence service, the Romanian Intelligence Service. The set of urgent reforms in the intelligence sector that were implemented in the period between 1990-1991 consisted in dismissing

Securitate's personnel, followed by adopting a new legislative framework in 1991 with the enforcement of the Law of national security and, later on, through the passing of Law No. 14/1992 regarding the organization of the Romanian Intelligence Service (SRI Monograph, 2015, p.70, p.74-75). Similarly, the Romanian Intelligence Service represents the competent authority regarding the preservation of national security, with competences in domestic intelligence gathering and analysis, as well as, in preventing and combating security threats such as terrorism, espionage, proliferation of weapons, cyber threats, hybrid threats and others.

Although there are three more intelligence services which operate domestically (the Protection and Guard Service – SPP, the General Directorate of Defense Intelligence – DGIA, the Department of Intelligence and Internal Protection within the Ministry of Internal Affairs – DIPI), these services have isolated competences in terms of intelligence gathering and analysis, at the level of specialized structures such as DGIA or DIPI or related to specific areas such as the protection and guarding of officials in the case of SPP. Thus, SRI represents the only institution in the field of national security that operates domestically in terms of prevention and combating of all security threats, as well as the protection of classified information (Matei, 2007, p. 632-633). The following sections will analyse in a holistic manner, at the strategic and organizational level, the process of reformation undergone by the Romanian Intelligence Service throughout the three decades, complementary to the analysis of the SSR criteria regarding the applicability of transparency measures, the participatory role of civil society in terms of addressing complaints and petitions to the intelligence services, the respect for civil rights and freedoms, rule of law and the accountability of the intelligence services.

The first decade as “The democratic foundation” – Implementation and democratization from the roots

Regarding the first decade of SRI's existence (1990-2000), the first aspect to be highlighted is a challenging reform initiated immediately after the establishment of the Service in 1990, which aimed at the institutional restructuring by recruiting new, young personnel and dismissing the Securitate's former officers (Vlachova, 2003, p. 270-271).

This reform was as necessary for the complete institutional reconstruction and a solid democratic foundation as it was challenging to implement in terms of supporting the activity with a limited number of human resources or adaptability to the requirements of combating security threats simultaneously with the susceptibility of beneficiaries to the resulting intelligence product (Nathan, 2004). Similarly, this revolutionary first step, so necessary for a fresh and democratized starting point of the Service regarding the consolidation of constitutional values in the conduct of intelligence activity, represents the indisputable argument for the lack of foundation regarding the labelling of the Romanian Intelligence Service as “the heir or the successor of Securitate” (Watts, 2001, p. 20).

It should be emphasized that SRI was the first intelligence service among the European states with a communist background (Georgia, Poland, Hungary, and Czechoslovakia), which adopted the measure of complete institutional revival and the dismissal of officers belonging to the former Securitate with the aim of eliminating from the roots autocratic practices and mentalities and allowing the incorporation of democratic values at the level of its staff, as well as the sedimentation of a set of principles and rules of conduct and professional ethics (Watts, 2001, p. 21). For these reasons, the validity of the unfounded interpretation in the press regarding the existence of a “heritage or continuity of Securitate” (Hellvig, 2023, p.7-8) cannot be accepted, mostly because SRI is the only European intelligence service that was restructured in terms of the personnel, practices, objectives, values and institutional missions as a complete and definitive detachment from the totalitarian approaches. Contrary to widespread erroneous opinions during the 1990-2010 period, which highlighted the “Securitate’s legacy” or the “maintenance of the former Securitate’s personnel within SRI” or “incomplete reformation due to the obstacle of preserving the values of the Securitate” (Mungiu-Pippidi, 2018, p.110), it should firmly be emphasized that gradually, starting with the first years, SRI has made extraordinary efforts for the complete restructuring of the personnel, a reform that was finished throughout the first decade, in the context in which this reform could not even have been sustained logistically by completely and rapidly eliminating the personnel, starting in 1990, the year when the Service was established (SRI, 2015). This paper shares the firm idea that the

unfounded opinions above affect the perception and credibility of the success of Romania's intelligence reform at the academic level, bringing to attention an outdated perspective and a distortion of the correctness of the data in a dislocated way, the Service being in reality completely reformed (Dumitru, 2014), a fact that was confirmed by other authors (Matei, 2007).

In a retrospective analysis, on the measures implemented in the first decade, it is observed with priority that the institutional objectives for combating threats that would endanger the democratic values and the constitutional order, such as extremist, anti-constitutional actions or the attempt to coagulate some structures of communist origin (SRI, 1994, p. 8), are particularly important to prevent any attempt to destroy the new democratic order. Also, regarding the first transparency measures implemented by the Romanian Intelligence Service, the year 1994 represents the moment of publication of the first activity report, an action continued successively and annually with the aim of informing the public in a detailed and thorough manner regarding the nature and type of threats to security that Romania was facing (showing utility for increasing society's awareness, defending citizens' rights, but also making the public aware of the objectives and directions of action of the Service) (SRI, 1994). Contrary to the unfounded opinions according to which the Service did not offer transparency on the activity reports, it is clearly observed that the structure of the activity reports offered detailed sections regarding compliance with the legality of the measures implemented by the Service (such as the necessity and legality of the surveillance mandates, their number and the reasons on the basis of which they were issued). Also, the detailed presentation in the annual SRI reports regarding the consolidation of the Service's relationship with citizens is another example of transparency.

The transparency actions that characterized the period 1994-2000 showed an upward curve both at the level of the relationship with the citizens and at the level of strengthening the public's awareness of the democratization of the Service through the legality of SRI's measures (SRI, 1995), the results of civil control over the activity of the Service, as well as SRI's directions of action. In just a few years, the Service managed to register an average degree of trust of 15-20% against the background

of healing the collective trauma of the reprisals of the former regime (SRI Monograph, 2015, p.21). Analysing the elements from the first decade, one can observe the solid implementation of the elements of transparency by adopting some mechanisms to facilitate public opinion through the establishment of the Letters-Audience Bureau (SRI, 1998), the speedy and prompt resolution of requests and petitions through an open attitude, as well as the annual return of documents confiscated by the former Security and the opening of access to researchers to study the SRI archives. These efforts have decisively contributed to building a relationship of trust with citizens and healing the wounds of the past, as confirmed by public opinion polls and accentuated by the annual increase in the number of petitions and requests from 2800 (SRI, 1998, p. 27) to 8000 petitions accompanied by a number of 400 audiences, at the end of the first decade in 2000 (SRI, 2000, p.18).

Moreover, an important role in the transparency of the activity, in addition to the detailed exposition of the directions for combating threats and the measures arranged for the defence of the constitutional order (SRI, 1996, p. 24-27), was the conclusion of the collaboration protocol with The National Council for Studying Securitate's archives – CNSAS, with SRI being the first institution to start this process at that time (SRI, 2000). Thus, it is found that from 2000 onwards, contrary to the allegations in the mass media over time, the Romanian Intelligence Service gradually handed over the documents of the former Security to CNSAS, being an aspect updated annually in each report of the activity. Therefore, in 2023, the final handover of the last remaining part of the documents took place, as proof of the complete availability for understanding the past. An important aspect to understand in order to definitively dismantle the myth of the "heir of the former Securitate" prearranged in the conspiracy narrative, is the fact that certain logistical and factual impediments contributed to the procrastination of the complete handover of documents, not the intention to preserve power or concealment by SRI, expressions that are often found in disinformation materials intended for the public (Hellvig, 2021).

Regarding the applicability of the rule of law, the priority was to coordinate the activity within the limits strictly provided by the legal framework (SRI, 1999). The adoption of a democratic legal framework

for the national security sector was a priority in the first decade, being a basic element of the reformation of the intelligence sector. Important mentions include Law No. 51/1991 on national security, the Operating Regulations of the Romanian Intelligence Service in 1993, as well as the adoption of additional laws such as the conceptualization of the state of military personnel through Law No. 80/1995 and Law No. 45/1994. Another important aspect is the active involvement of SRI for rethinking the conceptual framework regarding the inadequacies and gaps of the normative framework, as well as mediation for the possibility of citizens addressing the People's Advocate regarding the exploitation of the right to petition and address (SRI, 1999, p. 17). At the same time, the governance of the principles of legality in the conduct of intelligence activity also emerges from the results of legality control, in the sense that from 1994 to 2000, the number of mandates for the temporary restriction of citizens' rights and freedoms was always ordered by the Public Prosecutor's Office of the High Court of Justice based on reasonable suspicions thoroughly documented by the Service and related to security threats that were extensively detailed in annual reports (SRI, 1994-2000). Also, the legality controls from the reference period highlighted the permanent verification of compliance with legal competences and activity limits in accordance with the legal framework and the rigorous fulfilment by the Service of legal requirements.

Moreover, democratic control over the Service's activity is carried out through a complex system in three dimensions: parliamentary control, legality control, and financial control (SRI, 2015). Related to the dimension of parliamentary control, it is worth mentioning the establishment in 1993 of the Permanent Joint Commission of the Chamber of Deputies and the Senate for the exercise of parliamentary control over the activity of the SRI, which operates through specific requests, verification of reports, and requested information on the legality and efficiency of the Service, as well as through the organization of inspections, both permanent and unannounced, at SRI's units in order to verify the ways of managing the activity and the supervision of the institutional modernization process. At the same time, the control of legality is a complex mechanism that is carried out both internally through the Legal Department of the Service and externally through the

Parliament and judicial bodies such as the Romanian High Court of Justice and the prosecutor's office attached to the High Court of Justice in order to authorize surveillance mandates. Through judicial control, the proportionality of the restriction of rights and liberties is verified, as this is the basis on which suspicions regarding the possibility of manifesting national security threats operate. Financial control operates at three levels: internally through its own Directorate of Preventive Financial Control and externally through the audit of the Court of Accounts, but also through the framework procedures for the transmission of economic-financial documents of the institution to the Ministry of Public Finance (SRI, 2015, p. 107-109).

In this sense, the progress recorded in the first decade in terms of the Service's accountability was done by strengthening the dialogue with the Parliamentary Commission through inviting its representatives to the assistance sessions at the analysis-balance meetings of the Service as well as to the training sessions of future officers within the National Intelligence Academy. Moreover, in relation to financial control, the rigor of complying with the requirements imposed by budget management contributed to the consolidation of financial discipline, and a significant step was taken by the Service by establishing the Financial-Logistics Command in 2000 for the internal supervision of the way funds were managed. At the same time, it was aimed at balancing compliance with the budgetary austerity measures with the need to modernize and make the activity more efficient and improve the personnel (SRI, 2000).

A final mention regarding the first decade of the Service is the active involvement of the Service both in the transparency of the strategic directions to combat threats at the national level as well as the contribution to the elaboration of the first national security strategy of Romania. Moreover, in the framework of the implementation of the institutional reform process and the efficiency of the institution's activity, other genuine arguments to be mentioned include: the uniqueness of the education process within the National Intelligence Academy through the professionalization of the field of intelligence to the highest standards, as well as the consolidation at the academic level of the culture of intelligence in Romania. At the same time, since the first decade, democratization, professionalism, as well as eligibility to the highest

standards, have been confirmed at the international level through the relationship with other high-performing intelligence services.

With a democratic tradition, in 1996, SRI cooperated with over 30 states and calibrated the practices in the field of intelligence, as well as the training of officers with those of international intelligence services and obtained international credibility (SRI, 1996). International cooperation is an important pillar of reformation in intelligence in the context in which it validates a rigorous set of practices at the international level between highly democratized and structured services and facilitates the flow of information. In this sense, it represents a solid argument for the validation of the democratization and the fulfilment of a set of rigorous requirements and standards to obtain international credibility (Ioniță, 2021).

The second decade as “The Maturity Age”: Consolidation and refinement of the reformation of the Romanian Intelligence Service

One of the absolutely necessary elements regarding the consolidation of the reform in intelligence is aimed at the strategic dimension, which is why the beginning of the second decade of the Service (2000-2010) started with the adoption of the “short- and medium-term action strategy of the Romanian Intelligence Service” in 2002, followed by strategies for the professional training of SRI personnel in order to make the operational capacity more efficient and develop an in-depth vision on the directions of action (SRI Monograph, 2015, p. 186). It is worth mentioning, in particular, the expansion of SRI’s competences by acquiring new ones as a national authority in the field of preventing and combating terrorism, respectively, the increase of responsibilities in the protection of classified information, consolidated by the adoption of a legal framework regarding the legitimization of these abilities, followed by the implementation of new instruments for regulation, planning, orientation and organization of specific activities by renewing SRI Operating Regulations in 2002 (SRI, 2001, p. 18). Moreover, SRI showed active involvement by providing knowledge to the Parliamentary Commission for legislative updating or by researching the other states’ legal framework in the field of national security with the aim

of supporting the efforts to expand the legal instruments in the intelligence activity, within the changing realities of the security environment (SRI Monograph, 2015, p. 171).

Also, by analysing the main references to Parliamentary control over the activity of SRI in the second decade, one can identify the increase in the rigors of the Parliamentary Commission, the active role of democratic control and the increase in questions and requests to the Service. For example, if in 2001, the first year of the second decade, there were 108 responses from SRI to questions coming from the Parliamentary Commission (SRI, 2001, p. 17), by the end of the second decade the number of responses went up to 150 annually, accompanied by active meetings of SRI representatives (SRI Monograph, 2015). Also worth mentioning is the complexity of the nature of democratic control through a variety of aspects that were verified and fell under the competence of the Service such as the concordance of internal regulations with the legislation in force, compliance with the legal norms regarding the restriction of citizens' rights and freedoms, the efficiency of the Service's activity, the efficiency of spending public money, the collaboration with CNSAS, and the conditions of access to SRI archive (SRI, 2001). If at the beginning of the second decade the control of the Parliament aimed at the fulfilment of the SSR criteria by the Service in a punctual way, compared with the end of this period, the increase of the dialogue between SRI and the members of the Commission is highlighted from the qualitative point of view of the diversity of the aspects discussed: staff dynamics and the achieved level in the process of institutional reform, as well as the requests addressed by the Commission regarding some media attacks on SRI (SRI, 2003) or regarding events of public interest such as the kidnapping of journalists in Iraq or the flood crisis (SRI, 2005).

It should be emphasized that the annual reports of the Parliamentary Commission have time and again highlighted the fairness of SRI's measures, the accuracy of the information activity, the respect for legal competences, and the professionalism of SRI staff, a fact often debated by the mass media through the lens of the consistency of positive feedback to SRI and the absence of criticism from parliamentary control. This hallucinatory interpretation of the media should not lead to the wrong idea of weak democratic control on the part of the Commission,

but, on the contrary, to underline the high degree of professionalism and institutional maturation of SRI to democratic standards. The press's role in a democratic state should fulfil the role of a "public watchdog", in the sense that it should ensure transparency in the limits of the media responsibility's principle, stipulated by ECHR's jurisprudence based on the article 10 of the European Convention on Human Rights. Likewise, mass media has the role of one of the external control actors of the intelligence services in a democratic state in the light of SSR criteria.

However, mass media attacks targeted at the Service's activity would often demonstrate the lack of press responsibility in terms of ECHR's jurisprudence, by intentionally misleading or by providing contradictory information to the public opinion regarding SRI's activity. An example in this sense could be emphasized by analysing the results of the financial control of SRI in the second decade, carried out by both the Parliament and the Court of Accounts in coordination with the Ministry of Public Finance. A first aspect that stands out is the budgetary austerity under the auspices of which the Service's activity was carried out and the strict planning of expenses, which, through special efforts, managed to carry out the Service's activity within normal parameters. The 2002 budget, in the amount of 3,254.62 billion lei, covered only about 65% of the real financing needs (SRI, 2002), while in the following year, if the real needs of the institution amounted to 7,217.5 billion lei for the normal course of business, the financial resources approved for SRI totalled only 4,278.3 billion lei (3,980.1 billion lei from the state budget and 298.2 billion lei from external credits), representing 59.3% of the estimated requirement (SRI, 2003).

Through special efforts at the level of internal audit, SRI's activity was made more efficient in conditions of insufficient resources, and the external financial control mechanisms emphasized the fairness and efficiency of the financial resources' management procedures, even in conditions of budgetary austerity, due to the excellence of human resources and the innovative strategy. However, an element of disinformation circulated in the public space which, up to now, consists of the distorted narrative on the so-called "*oversizing SRI budget from year to year*" and unfair accusations related to the management of resources, being a clear expression of the media's irresponsibility in the

context of SRI's clear transparency on financial management, the positive feedback of the external financial control mechanisms, but also the insufficiency of resources compared to the needs of the institution, as well as the increase in the complexity of the threats that need to be combated. With regard to the relationship with the citizens, the level of trust has increased, SRI being evaluated by the public opinion within the first five positions of the most proficient Romanian institutions (SRI, 2003).

Thus, the concern of the Service for optimizing the relationship with the citizens was a factor that determined a multiplication of the forms of communication with civil society (SRI, 2002, p. 50). An important factor in the unprecedented openness of the public to the Romanian Intelligence Service was the updating of SRI web page, which facilitated new channels of communication with civil society, registering a flow of approximately 300 users daily (SRI, 2006). Also, the promotion of SRI's values and mission increased citizens' awareness of the Service's identity.

This fact materialized through the annual increase in the number of petitions and addresses under Law No. 554/2001, with 42% more requests than in 2000 (SRI, 2001), and with 23.65 % more petitions compared to 2001 (SRI, 2002, p. 51) and 64% more than 2002 (SRI, 2003), thus registering at the end of the second decade over 49,365 petitions, of which 33,694 came from civil persons, 15,671 from legal persons and public institutions, and 2,602 messages to the electronic mail address (SRI, 2010). It should be noted that the petitions did not refer to criticism targeting SRI staff or the institution's proficiency (SRI, 2003), but aimed at a varied range of aspects such as reports on possible national security threats such as corruption, extremism-terrorism, financial banking fraud, and privatization, but also recruitment requests or information regarding the conditions of employment in the institution; notification of criminal activities that fall under the competence of other institutions (SRI, 2004, p. 40). At the same time, the response to written addresses was complemented by offering civil society a remarkable number of audiences, including mass media representatives, a fact that emphasizes the Service's compliance with the requirements of the SSR criteria regarding the inclusion of mass media and civil society in the ongoing activities, facilitating communication channels, and also SRI's

responsiveness to issues brought to its attention by representatives of the media, citizens, NGOs, etc. (SRI, 2005, p. 45).

Moreover, the novelty of the second decade, in terms of the transparency measures initiated by the Service, is highlighted by the implementation of the concept of security culture through the establishment of the Information Centre for Security Culture by SRI (SRI, 2003, p. 42). This innovative element was noted at the international level regarding the initiative of the Service to be directly involved in increasing citizens' awareness regarding national security aspects while increasing the participative role of civil society. Likewise, another significant aspect consists in the multitude of events organized by SRI addressed to the academic society and the civil society such as: "Campaign to promote security culture among young people", aiming at the application of the "Terrorism... near us" project in high schools (SRI, 2006, p.42), the expansion of the initiatives associated with the "Security Culture" project at the local level, the first stages being the counties of Braşov, Bacău and Galaţi (SRI, 2005), the Young Atlantis Summit, close to NATO Summit in Bucharest (SRI, 2008), as well as the Round Table "Society, Democracy, Intelligence", organized at the headquarters of the Service with the participation of journalists and academics in order to debate SRI Strategy Project, a fact that proves the assurance of a high level of participation and inclusion of the mass media and civil society as an opinion factor in the Service's projects (SRI, 2008).

Another notable concept initiated by the Romanian Intelligence Service that marked excellence in the art of communication consisted in introducing the concept of public diplomacy (SRI, 2007, p. 27) in the Service's strategy, alongside ambitious projects to attract human resources and increase the degree of interest of young people in national security issues, such as the "Intelligence Analysis" master's degree, organized in partnership with the University of Bucharest (a civil institution) and job fairs to attract human resources. Promoting the educational offer and career in SRI strengthens the brand of the Anti-Terrorist Brigade, both as a public image of the Service's employees and as a professional option (SRI, 2009, p. 32-33). Last but not least, related to the strategic dimension, SRI continued the tradition of making the strategic perspective transparent by emphasizing the objectives of the Strategic Vision 2007-2010 (Filip

and Ștefureac, 2011, p. 714), as well as SRI Public Communication and Promotion Strategy. Therefore, the flowering and fruition of public transparency at an unprecedented level and the priority of the Service to strengthen the relationship of trust and closeness with the citizens are remarkable, being complemented even at the academic level in order to increase the security culture through the establishment of *Intelligence* magazine and the scientific journal *Romanian Intelligence Studies Review* (SRI, 2009, p. 26).

Other important mentions that characterized the second decade consisted in expanding the competences of the Service through the establishment of the CYBERINT National Centre (SRI, 2010, p. 32) and the designation of SRI as the national authority in the field of cyberintelligence, together with the improvement of the activity of the National System of Prevention and Combating Terrorism (SRI, 2008), which demonstrates the complexity of SRI's approach to combating security threats and adapting to the demands of the security environment. Also, in relation to the dimension of international cooperation, the consolidation of international partnerships with the elite services and the increase of SRI profile within the European intelligence community, the increase of the institution's visibility within the European bodies, and the diversification of partnerships with 88 security services, three EU security structures, and a NATO security structure marked at the end of 2010 significant progress compared to the end of the first decade of existence, but also the expansion of the strategic dimension, including at the level of international cooperation through the adoption of the Concept of International Cooperation (SRI, 2010).

The third decade as “The Modernization Age”: SRI as a model of the intelligence reform

The third decade of the Service's existence (2010-2020) already emphasizes the refinement and consolidation of the mechanisms of operation, organization, international and inter-institutional cooperation and communication with citizens at level of excellence, being justifiably ranked in the top of the strongest intelligence services at the international level, due to characteristics such as: equidistance, ethics, professionalism

and impeccable conduct of military personnel, advanced operational, analytical and technical capabilities, but especially due to the elements of innovation with which the Romanian Intelligence Service contributes as a promoter within the international intelligence community. Thus, understanding that in this decade the evolution of the Service can no longer be approached in a reductionist way through the lens of the irreproachable application of the principles of legality, responsibility, transparency, and respect for citizens' rights and freedoms, the implementation of which has been abundantly demonstrated in previous decades. Therefore, the elements of novelty and innovation through which the Service is ranked among the elite of intelligence structures worldwide are presented in the following section.

Thus, the third decade of the Service's existence begins by perfecting the strategic art of the Service following the elaboration of the Strategic Vision 2011-2015-SRI in the information age (SRI, 2011, p.3) which had as its object the digital modernization of the Service through the grounding of high-performance cyber tools adaptable to the new realities, followed by the Intelligence Strategy – "Intelligence in the service of the citizens" 2016-2020 intended to calibrate the Service to the challenges of the technological era, so that in 2020 the strategic tradition is continued by implementing the Romanian Service Transformation Strategy of Intelligence 2020-2025 (SRI, 2020, p.6), under the prospective auspices of the evolution and reinvention of SRI at the highest standards. Moreover, the modernization of communication tools with the beneficiaries was governed by the principle of acquiring a high level of awareness in a security environment characterized by the amplification of hybrid threats, meaning that the year 2017 began with the launch of the Awareness Program aimed at strengthening preventive measures regarding the protection of classified information and combating cyber and espionage threats (SRI, 2017), followed by a campaign to increase civil society awareness of the risks of Islamic radicalization (SRI, 2019). Thus, from that decade on, the mission of the Service has expanded the framework by prioritizing the awareness side of the main security risks and threats intended for civil society and beneficiaries, predominantly in the field of cyber awareness (SRI, 2020).

The transparency measures aimed at a high level of interaction with civil society manifested through the organization of events, starting in 2012, such as the seminars on “Anti-terrorism and Counter-terrorism in the Knowledge Society” and “Romanian Intelligence Service in the Knowledge Society,” the “Career Days” action, and the International Exhibition Black Sea Defence and Aerospace 2012, as well as the inauguration of the monument in memory of the anti-terrorist fighters who fell in the Revolution of December 1989 (SRI, 2012). Similarly, the service continued the same trajectory by hosting international security conferences such as “Security in the Black Sea Region. Shared challenges, sustainable future,” and “Intelligence in the Knowledge Society” (SRI, 2017), and the contribution to strengthening the security culture through events such as the “MVNIA Tour,” and “MVNIA Candidate Day” (SRI, 2017), and “Anti-Terrorist Fighter’s Day” (SRI, 2018).

Another significant moment that emphasized SRI’s identity and the tradition of sharing emblematic moments of the Service with the public was the publication of SRI Monograph, Volume I, on the occasion of its 25th anniversary celebration (SRI, 2015), followed by the already announced publication of the second volume of SRI Monograph to aim at describing the main experiences and objectives of the Service, characteristic for the period 2015-2023 (Hellvig, 2023). In fact, the Romanian Intelligence Service is one of the few intelligence services that stands out through a tradition of transparency and closeness to citizens, using social media such as Facebook, Twitter, LinkedIn, and Instagram (SRI, 2018), but also documentaries such as “Tradition of Good: 40 Years of Anti-Terrorism in Romania” (SRI, 2014), “Culture of Security” (SRI, 2015), as well as videos marking anniversary moments such as “SRI-24 Years,” “SRI-25 Years in the Service of Democracy,” and “SRI 27 Years: Partnership in the Service of Citizens.” Also, the presence in the media space (press releases, answers to questions addressed by journalists, statements of the spokesperson, TV reports) and virtual space (posts on the website and social networks) was also accompanied by intense academic activity through dialogue with representatives of some prestigious universities in the Euro-Atlantic space, publishing activity through academic journals under the coordination of “Mihai Viteazul” National Intelligence Academy – MVNIA, and the exchange of expertise

in the field of intelligence, as well as the organization of postgraduate courses aimed at civil society under the auspices of MVNIA (SRI, 2013). Last but not least, it should be recalled that in the field of international cooperation, at the end of the third decade of the Service's existence, SRI registered no less than 126 partnerships with intelligence services and authorities from 69 states (SRI, 2019).

In the end, it is relevant to mention some aspects considering the democratic control achieved from the perspective of European bodies. Therefore, the decisions of the European Court of Human Rights (ECHR) in which SRI has been involved over the last 30 years, can provide some references in terms of SRI's compliance with SSR criteria:

- ECHR decision no. 19806/06 (Case Ovidiu Lucian Tender vs. Romania) regarding the illegality of interceptions by SRI. It should be noted that the claimant's request was rejected by the ECHR.

- ECHR rulings regarding the measures applied in the case of foreigners who were expelled on reasons concerning national security, as espionage and terrorism (Case 9356/11, SC vs. Romania, Case 75325/11, NM vs. Romania, Case 10337/4, Lupsa vs. Romania, Case 80982/12, Muhamad vs. Romania), through which the fragility of the implementation of judicial control and the methods of removal from the territory of Romania by the judicial bodies was found, but this fact does not fall under SRI's competence and does not refer to the Service's attributions. The references in these decisions that concerned SRI were based on the documents that formed the conviction of the national courts regarding the threats to national security, but the measures recommended by ECHR did not concern the illegality of interception measures that fall under the competence of SRI, but only strictly the judicial procedures in which the foreigners were involved, falling into the competence of the national courts.

- In *Rotaru vs. Romania* (SRI Monograph, 2015, p. 89–90) and *Bucur vs. Romania* (SRI Monograph, 2015, p. 119–120), the Service provides in SRI Monograph detailed explanations regarding the Service's involvement in these cases in an open and transparent manner. This offered the civil society the opportunity to learn about the finality of the ECHR procedures and also about the involvement of SRI in the cases pending before the Court.

A comparative analysis of the innovative elements of the Romanian Intelligence Service at the European level

In order to enrich the research objective, a short comparative analysis between the evolution of the Romanian Intelligence Service and other European intelligence services with a communist background (Martin, 2007, p. 553-554) would provide utility by taking 1989 into account as the turning point and the need for democratization that arose after the fall of communism in Europe. The qualitative indicators for the analysis was selected as the democratic criteria presented in the intelligence sector reform theory, such as transparency measures, the strategic dimension, and the relationship with citizens, and the levels of democratic control over activity. In this respect, the Czech Security Intelligence Service (BIS), the Bulgarian State Intelligence Agency (SIA) and the Slovak Internal Intelligence Service (SIS) were selected for the analysis as being domestic intelligence services from European states with a communist background that needed intelligence sector reforms after 1989.

Analysing the incidence of the SSR criteria presented by Czech Security Intelligence Service (BIS), the presence of a legal framework and inter-institutional cooperation, as well as control mechanisms of the Czech Parliament Committee on intelligence activity, it can be observed, without offering a detailed presentation, as in the case of the Romanian Intelligence Service, the number of documents regarding interpellations, monitoring directions, recommendations, or feedback from the Commission annually (Czech Security Intelligence Service-BIS, 2022). Also, although in a similar way BIS presents a structure of internal audit and legality control (Czech Security Intelligence Service-BIS, 2003-2022), the Romanian Intelligence Service differs by transparency, not only in terms of budget management directions allocated but also in that it highlights the annual results of the Court of Accounts on the rigor of financial management. Another similarity from the point of view of transparency consists in the annual detailed exposure of the typology of security threats and the international context through the annual reports posted on the website.

However, what can be seen par excellence by analysing the annual reports of the Romanian Intelligence Service and the Czech one, consists of three major dimensions by which the Romanian Intelligence Service shows a different approach: the consolidation of an education and training system for officers – MVNIA, with all three levels (bachelor's, master's, PhD studies), building a strong academic pillar through the academic journals under the coordination of the Service or MVNIA and the perpetuation of an academic dialogue through conferences and exchange of expertise, but also the existence of an autonomous strategic dimension following the elaboration of SRI Strategies, as well as those related to personnel training, improving the communication relationship with the public or related to international cooperation. Also, as in the case of the Czech Intelligence Service, the Slovak Internal Intelligence Service - SIS presents annual activity reports starting from 2011 related to the typology of threats, external control mechanisms of the activity from the point of view of the legality of the measures ordered by the Committee of the National Council, and inter-institutional cooperation (Slovak Intelligence Service, 2011-2022). However, in the case of BIS and SIS transparency measures, there is a lack of exposure to the active interaction in the relationship with citizens and of the annual detailed presentation of the number of surveillance mandates applied in relation to threats related to the temporary restriction of citizens' rights, as in the case of SRI.

Analysing the efforts of the Romanian Intelligence Service, an active involvement in the relationship with the citizens on an annual basis following the organization of events for the presentation of educational offers but also for the distribution of identity elements is highlighted by excellence. Moreover, another dominant aspect is SRI's constant priority for consolidating the security culture and public awareness following the annual events organized by the Service, as well as the academic activity, a fact that is missing in the case of the other two services, BIS and SIS. At the same time, by analysing the transparency measures implemented by SRI, it appears that every year the Service emphasizes the number of requests, hearings, petitions, and interactions with civil society, as well as the nature of the requests, and evaluates the objectives of strengthening the relationship with citizens.

Moreover, the efforts made by the Romanian Intelligence Service to approach citizens are indisputably highlighted by the clarity of interaction with the public, the display of documents intended for civil society (monographs, journals, and security bulletins), and the promotion of the Service's missions through educational offers, seminars and conferences. Also, the Romanian Intelligence Service undoubtedly offers the opportunity to respond to requests received from mass media and civil society. Therefore, an active communication framework is ensured in order to respond to current security issues that otherwise could affect the credibility of the Service (aspects such as the number of surveillance mandates, collaboration protocols concluded). Last but not least, analysing the elements of transparency of the Bulgarian Intelligence Agency (SIA), one notices the brief presentation in general of the legal framework, legal powers, and organizational mission without however offering a section of the annual reports to the attention of the public regarding the results of democratic control over activity, the relationship with citizens and other transparency criteria that were previously analysed. Also, SIA only presents the areas of competence in general without presenting the security challenges or threats or the other elements present in the case of BIS and SIS (Bulgarian State Intelligence Agency-SIA).

Discussions

As a result, the identity imprint that makes the Romanian Intelligence Service unique in the intelligence community is made up of elements of innovation and continuous reinvention, respectively:

- a visionary intelligence service, with its own strategic dimension at the level of improving human resources, operational, and technical capabilities and establishing directions of action in alignment with national defence strategies.
- a very involved intelligence service, close to the citizens, excelling through continuous reinvention of the ways of communication and interaction with civil society every decade (social media, documents and monographs intended for the public, organization of events, and promotion of the organizational mission)

- an intelligence service with a solid educational and academic footprint (by modernizing an education system that professionalizes the field of intelligence and equally impacts the academic sphere through its own tools, such as academic journals under the auspices of the service and international exchange of expertise)
- an intelligence service promoting the security culture and awareness (establishing as its line of competence and priority the increase in the degree of awareness of civil society and beneficiaries in the face of security threats, grounding a solid security culture in Romania by increasing the role of civil society)
- an intelligence service that continuously refines its art of transparency (through the clarity of details on the main actions ordered to protect national interests, the open attitude towards the public regarding issues brought to the attention of the mass media or civil society, and the unequivocal openness for the fruition of public communication tools).

As the analysis has shown, it could also be observed based on research of the state of the art, that the previous approach of portraying the image of the Service was reductionist. This approach was based on the characteristics of the first decade in the history of the Service, when the existing reforms took shape in the form of creating the foundations and institutional revitalization, without updating the institutional progress in the literature, as the refinement of public communication, and the strengthening of the relationship with the citizens that marked the third decade as well (Matei and Bruneau, 2011). Focusing on errors or negative aspects without uniformly and objectively scoring the progress or successes was equally another gap that was observed in the state of the art (Zulean and Şercan, 2023). Moreover, many aspects referred to in the literature in the field regarding the need to perfect some changes considering the Service's activity are no longer applicable, given the fact that the Service has shown adaptability and acceleration of evolutionary directions, constantly implementing measures of institutional progress or rectifying certain aspects necessary to consolidate the democratization of the activity. Also, using deductive reasoning, this research makes an academic contribution by demonstrating the invalidity of conspiracy theories in relation to the logical and factual arguments of the existing reforms.

Conclusions

First of all, as a result of the analysis carried out, it has undoubtedly emerged not only the successful implementation of the SSR criteria by the Romanian Intelligence Service since its establishment, but also the modernization efforts made in each decade for the sedimentation of a relationship of trust with civil society, for the faithful observance of the legality of the activity carried out, for the efficiency of the directions of action, but also to obtain credibility at the international level and in relation to the legal beneficiaries. By evaluating the progress made over time, it is especially noticeable that, referring to the evolution of other intelligence structures having the same starting point – the year 1989 – the Romanian Intelligence Service currently has the most active international cooperation considering the high number of protocols with other intelligence services and institutions. In addition to that, the elite intelligence services have validated the activity of the Service in terms of criteria as: professionalism, ambitious objectives for approaching citizens, yearly tangible and dynamic actions in order to promote organizational identity and missions, and active involvement at the academic and educational level. For these reasons, the evolution of the Romanian Intelligence Service in relation to the implementation of the SSR criteria and continuous modernization efforts can be framed as a model of successful democratization and reformation in intelligence at the European level.

Secondly, the main risks regarding the assimilation by the public of disinformation or conspiracy theories elements regarding the lack of transparency of the Service or the fragility of democratic control generate the erosion and deformation of civil society's perception regarding the mission of the Service, being in total discord with reality. This fact can lead to security vulnerabilities as well as the procrastination of some necessary measures due to resistance to change (legislative initiatives in order to modify and renew the legal framework for the operation of intelligence services, the allocation of consistent resources in relation to the complexity and sophistication of security threats, etc.). On the other hand, it is more than necessary to abandon mentalities such as associating the Service with the intention of returning to "Securitate's

practices” or institutional assimilation in the sense of “heir of Securitate” considering the huge difference in values, practices, objectives, and tools of communication and rapprochement with civil society. In view of these considerations, the Service presents its official version through the public communicates in order to clarify to the public some aspects regarding the image that could be exploited by conspiracy theories, meaning that the Service’s public releases are one of the most effective tools in order to combat disinformation regarding the activity of SRI.

Last but not least, at the European level, the history of the reformation of the Romanian Intelligence Service proves to be a representative model of SSR related to the ingenuity of strengthening the relationship with citizens, the transparency of the activity, and the promotion of the means of public diplomacy and communication strategy, as well as gaining prestige as a result of international cooperation. So, on the verge of celebrating 35 years of existence, the Romanian Intelligence Service stands out through a transformative evolution in the spirit of democratic values and principles, crowned by an organizational philosophy and a strategic vision in its three decades of existence. As the Director of SRI mentioned, the transition was made “from a newly created service, with in-working norms and procedures, almost without partners, and not yet modernized” (SRI, 2019, p. 4), to a Service that currently represents one of the strongest cornerstones of the international intelligence community alongside the elite of international intelligence services.

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HISTORY AND MEMORY IN INTELLIGENCE

SECURITY, POLITICS, AND THE CIRCULAR ECONOMY: A HISTORICAL STUDY OF ROMANIA'S RAILWAY EVOLUTION (1846-2007)

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Abstract:

The modernization and technological advancements in railway systems have proven essential in enhancing both the safety and security of rail transport. Given the important role it plays in the movement of people and goods, Romania's rail infrastructure has an essential role as it is considered as European critical infrastructure, which also indicates the increased role of rail transport security.

This research analyses the evolution and development of Romania's railway infrastructure, focusing on security and resilience aspects, while examining the role of the Romanian state through the lens of political and economic factors. The article provides a synthesis of the main specialized studies that explore the relationship between railway development and factors such as political regime, political motivation, socio-economic investments, population growth, and times of crisis. Additionally, it addresses the relationship between security, technological development, and the related political legislative framework.

The article examines from a political science perspective the historical evolution and impact of the determining factors on railway development, as well as the dynamics of security factors, emphasizing that citizen safety remains at the core of the state's actions. Thus, this study has two main research questions: (1) What factors contributed to railway development in Romania between 1846 and 2007? and (2) What factors influenced citizen safety during the same period?

Keywords: *railway infrastructure, security, resilience, political factors, socio-economic investments.*

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Introduction

The history of the Romanian Railways (C.F.R.) has been shaped by precise events, with several key moments standing out. Among these are 1880, when the Romanian state, through radical measures, took over foreign concessions¹; 1918, when following the unification of the state, Romania had to restructure its railway network and services in line with the new unified traffic directions and the development needs of society; the period under socialist patronage; and later, the privatization.

The development of Romania's railway system between 1845 and 2007 reflects a complex evolution across multiple levels, with moments of adaptation and transformation within the geopolitical contexts of the Balkans. The political context played a significant role in this gradual transformation (Mahoney & Thelen, 2010), and the history of C.F.R. shows that this influence has been crucial over time. Almost all countries have traditionally viewed railways as a "service of general economic interest" (Windhoff-Héritier, 2001; Van de Walle, 2008), ensuring transportation across the country for workers to reach their workplaces. To achieve this goal, legislative procedures were adopted to guide policy transformations (Dyrhaug, 2022) for stronger railway development. Railway construction was a crucial element for the new state to strengthen territorial and social unity, as well as to promote economic and technological growth. Over time, the facilitation of access to a single market and the freedom of movement identified transportation as the foundation for a common development policy (Degli Abbatì, 1987; Erdmenger, 1983).

Considering the national importance of a good railway system, the aim of this article is to address railway development in Romania and how it became the main driver of the country's transformation into a modern state. Through implemented policies and attention to safety – both for citizens and railway infrastructure –, the railway network significantly contributed to territorial integration, economic growth, and population mobility. We will use the term "safety" in reference to citizens and the railways, as the concepts of "security" and "resilience" emerged much later.

¹ Due to the lack of financial means and technological know-how, the new Romanian state was prevented from having any initiative to build railroads and forced Romanian decision-makers to turn to foreign capital and specialists for the construction of the first railroads on Romanian territory.

Additionally, observing the rules and regulations adopted for railway safety, it becomes clear that these align with the definitions used for railway security and resilience. To sustain our arguments, we will present the theoretical foundation of our research on railway development models, both from Europe and other continents, to show that despite cultural differences or economic progress/ regression, the ideas of development are similar, the desires were common and constant, and the models of inspiration were drawn from everywhere.

We chose to present the evolution of Romania's railway network following a historical chronology, as the events over time played an essential role in influencing the country's economy, defence, and social structures. The lessons from past experiences can be a valuable support for the present and future, while also providing logic and coherence to the entire text.

Main stages in railway structure development in Romania

The appearance of the first railroads in Europe and the economic advantages of faster transportation of Romanian cereals attracted the interest of Romanian authorities. The road from ideas to facts was extremely difficult due to many internal and external obstacles. Thus, the lack of specialists, combined with the ignorance or hidden interests of some Romanian politicians were strong internal obstacles, and the Romanian economic potential unknown to Western financial circles was an external obstacle. With extremely high financial costs, the first railway lines built by the foreign consortiums Barkley – Staniforth (Bucharest – Giurgiu line), Victor von Ofenheim (Burdujeni/ Suceava – Roman line with branches to Iași and Botoșani), Strussberg (Bucharest – Pitesti – Slatina – Craiova – Vîrciorova) showed that financial sacrifices had to be made for the welfare and development of the new Romanian state.

Trail periods (1846-1869): To better understand the conditions under which the first railways were built on national territory, as well as their subsequent development, it is necessary to refer to the historical circumstances of the era. Wallachia and Moldavia were, until the mid-19th century, separate provinces politically, administratively, and economically, and were under the suzerainty of the Ottoman Empire,

with relative autonomy. Transylvania and Banat were an integral part of the Habsburg Empire (Nahaiciuc, 2020).

The era of Alexandru I. Cuza and Carol I was one of profound changes in Romanian history. Romanian society was shaken out of a historical lethargy and thrown into the whirlwind of modernity. The reforms initiated by Alexandru I. Cuza in the administrative, institutional, economic, educational, cultural, and health sectors had a significant impact on a very young Romanian state, and this was also reflected in the initiative to build railways to modernize the Romanian Principalities. The first political debates regarding railway construction took place between representatives of the bourgeoisie, the entrepreneurs, who later became the Liberals, while the opponents were the landowners represented by the Conservative Party (Nahaiciuc, 2020). Due to financial problems, distrust in concessionaires' offers, and disagreements between representatives of the two factions, all offers received were rejected, leading to failure.

The major developments (1869-1919): After Cuza's abdication, Prince Carol I, who was brought to lead Romania, continued the modernization process, including the construction of railways, even during the War of Independence (1877). Along with the emergence of railways, the country's legislature also adopted laws concerning the safety of passengers, goods, and railway employees. Thus, by Decree 516 of March 26, 1870, published in the Official Gazette on March 26, 1870, the "Law on the Police and Operation of Railways in Romania" was enacted. In line with ensuring the safety of citizens, special commissioners with responsibilities related to the railways were established, and the "Regulation on the Duties of Special Police Commissioners at Railway Stations" was promoted through Decree 502 of March 23, 1876, published in the Official Gazette on March 23, 1876.

The interest in creating and expanding railway networks was common both to the Romanian Principalities and their neighbours, who sought to create an interconnected railway network that would ensure the circulation of goods and passengers to the Danube and the Black Sea. The high costs of land transport, mountainous terrain, poor roads, and lack of security made the railway network vital for modernization

(Lampe, 1975). The first railway lines were financed by European powers that wanted to connect Europe with the Ottoman Empire and the Middle East, and the main construction directions followed this vision (Stanev et al., 2017).

After gaining the independence (1878) and declaring Romania a kingdom (1881), there was already a railway network operated by concessionaires (Nahaiciuc, 2020). The Romanian Railways was a new institution, obliged to organize itself as it progressed. Thus, vocational schools were established to provide proper professional training for staff (Dorobanțu et al., 2018). *At the same time, the first repair workshops and wagon factories appeared.* In the mentioned period above, the first repair workshops and wagon factories appeared too.

The constant concern of the railway administration's leadership was in two main areas: eliminating technical defects that posed accident risks and maintaining a high level of specific knowledge. Technological improvements aimed to increase the safety of rolling stock movement on the railway, while professionalizing staff sought to improve traffic safety. Another measure taken to increase railway safety was the doubling of traffic lines, necessary because transport capacity was limited (Iordănescu & Georgescu, 1986).

Safety in the period 1869-1918: The first steam locomotives underwent improvements in design and efficiency, including more powerful engines and better weight distribution to reduce track wear and increase stability. Safety systems were introduced in locomotives, such as safety valves to prevent boiler explosions, and the braking system began transitioning to the air brake system, invented in 1869 by George Westinghouse (Westinghouse, 1910). The initial structure began to change, with more robust structures and materials resistant to impact being used to protect passengers in case of accidents. The same modifications were applied to freight wagons to reduce the risk of losing cargo.

The development of steel rails allowed for faster and heavier trains, reducing the risk of track deformation and derailment. For railway staff, locomotive cabs were designed with better comfort, providing protection against bad weather and improved safety.

The interwar period (1919-1945). The end of World War I brought about the unification of all Romanian provinces, forming Greater Romania. The main positive aspect was the consolidation of political, institutional, and administrative unity under a single leadership. However, the war left deep scars across Europe, significantly affecting Romania as well. The railway infrastructure also experienced setbacks due to the war. The pre-war organization was lost, some services had been replaced by military organizations, several departments were dissolved, and many engineers had been transferred to the army (Dorobanțu et al., 2018). The unification came with a new territorial reality, where many railway lines, those in Transylvania, Bukovina, Banat, and Dobruja, had been built to meet the economic needs of other countries – Hungary, Austria, Russia, and Turkey – and were diametrically opposed to the economic and strategic interests of the new Romanian state. Additionally, the new structures serving the railway lines had different forms and organizational principles – the Hungarian, Austrian, and Russian railway administrations –, where many employees did not speak Romanian, and the equipment and rolling stock were highly complex and difficult to manage. All these problems needed to be resolved swiftly to maintain traffic safety and ensure a similar technological process across all regions. Thus, the first step taken by the government, based on proposals from within C.F.R., was implemented through *Decree-Law 589* of February 7, 1919, which divided the entire railway network (11,678 km at the time) into four regional branches: București, Iași, Cluj, Arad (Nahaiciuc, 2020).

Although the aim was better and more efficient organization, the results were the opposite: there was no communication between the regional branches, and the necessary exchange of resources (wagons, locomotives, coal, personnel) did not occur. This policy of decentralization favoured local and regional preferences, led to administrative disorder, and allowed politicians to infiltrate the activities of the regional branches, thus undermining the authority of the General Directorate, which was forced to adopt a political leadership (Iordănescu & Georgescu, 1986).

During this period, the Romanian language was imposed in work relations – a challenge for employees in Transylvania, as all staff was

required to read the instructions in the *Official CFR Bulletin*², which primarily addressed safety issues.

The increase in railway-related crimes led to the adoption of *Law No. 163* in 1924, “regarding certain non-international crimes committed by employees of state or private railways.” Later, in 1929, the *Law on the Organization of the State General Police* was introduced, with subsequent amendments in 1930, 1931, 1936, and 1940, which included articles dedicated to railway transportation and the responsibilities of state representatives for combating crime and ensuring citizen safety (*Poliția Română - Scurt Istoric, n.d.*).

In August 1927, the liberal government succeeded in passing a law that guaranteed the non-involvement of politics in C.F.R. decisions, thereby securing the much-desired autonomy for the railway institution. Thus, although a global crisis occurred between 1929 and 1933, with repercussions in Romania, the C.F.R. Directorate’s situation stabilized with the help of the “Leverve” loan³, which enabled the reconstruction and development of Romanian railways (*La Roumanie Face Aux Rivalites Politiques et Financieres Internationales 1922-1935, n.d.*). New carriages with enhanced safety features were introduced, ensuring safer and higher-quality transportation.

From the Directorate’s level, safety regulations were constantly disseminated through the *Official CFR Bulletin* to protect railway personnel, rolling stock, and passengers. It became mandatory for all staff to have completed their studies and later undergo professional training at the workplace to raise professional standards. Manuals were created containing a summary of current norms, regulations, and instructions to ensure that safety regulations were understood by all employees (Altmann, 1900; *Foia Oficială C.F.R. nr. 512, 1930*).

In 1937, *Law 118* was issued, regulating C.F.R. operations, police activity, and penalizing damage to railway materials and lines, punishable

² Decree No 84 of March 4, 1949, established that the main publication of the Romanian Railways is the Official CFR Bulletin, which publishes the orders issued by the Minister of Transport, the orders of the CFR Director, other normative acts relating to railway activity and safety, as well as service depositions.

³ In 1929, The Romanian railways benefited from a stability loan, which was called the “Leverve Program”, after the name of the Secretary General of the International Union of Railways.

under the “*King Carol II*” Penal Code (Loredana, 2015; Parliament, 1937). These regulations were the first to increase the security of the railway infrastructure, criminalizing a series of acts aimed at affecting the integrity of the railway and referring to the damage to lines, railway material and railway accidents.

The achievements of C.F.R. during the interwar period are noteworthy: technical transport conditions were improved, passenger comfort and safety were enhanced, placing the network among the most well-organized, equipped, and efficiently operated railway networks in Europe.

Safety in Interwar period 1918-1945: Technological progress did not bypass Romania, and the new Pacific-type steam locomotives ensured higher speeds, essential for freight transport, and increased safety for mechanics and passengers, as the air brake system improved safety standards (Compton, 1949). Passenger cars were equipped with heating systems, and specialized freight wagons appeared, designed for different types of cargo, ensuring safer transport. Impact damping systems began to be implemented, protecting passengers and goods in case of sudden braking or collisions.

Automatic coupling systems between locomotives and wagons were widely adopted, reducing accidents among railway personnel and ensuring more efficient train operation. The strengthening of tracks and the use of more durable materials for constructing or modernizing bridges and tunnels raised the level of railway safety.

The military needs imposed by World War II led to more advanced technical solutions for the rapid and safe transport of troops and military supplies.

The period after World War II (1945-1965). Railway transport was seen as a vital component of the national economy. In response to the immediate need for increasing workforce specialization and establishing responsibilities, especially for future planning, the Railway Design Institute was established on November 11, 1947 (Nahaiciuc, 2020). It was the first departmental institute in the country, providing the technical documentation necessary for the reconstruction, development, and modernization of railway transport. Numerous projects designed by

the Institute, through their complexity and the originality of the adopted solutions, played an essential role in the development of railway transport and, implicitly, in the development of the country.

In 1948, the new communist regime nationalized the main enterprises, which also led to the loss of C.F.R.'s autonomy, an autonomy that had previously provided the institution with economic balance. The change in regime resulted in a series of reorganizations, with the General Directorate of C.F.R. being transferred between various ministries. In 1953, the Ministry of Railways was established, only to be dissolved in 1958, reappearing in 1966. On September 15, 1969, by the *Decision of the Council of Ministers no. 1815*, it was subordinated to the Ministry of Transport (Nahaiciuc, 2020).

Nevertheless, examining this period reveals several technological achievements and a significant emphasis on safety, both for citizens and transported goods. A dedicated sector for traffic safety was created, aiming to transition from manually operated devices and installations to centralized command systems to enhance safety measures. By 1960, the number of centralized electrodynamic switches had reached 725, compared to the 122 electromechanical ones existing in 1944 (Botez et al., 1977).

At the same time, many railway consolidation works were carried out, and in 1961, projects began on railway sections aimed at their electrification to modernize them. This period also saw the evolution of rolling stock. To improve locomotive performance, manufacturing licenses were purchased, and Romanian factories began producing high-quality equipment, comparable to or even better than those in Western Europe. Additionally, other sectors of the railway industry developed, which, through the implementation of new technologies, provided increased safety for passengers, transported goods, and railway employees. The wagons and locomotives built in Romania were constructed according to international safety standards and complied with U.I.C.⁴ norms (Dorobanțu et al., 2018).

⁴ Union Internationale des Chemins de Fer or International Union of Railways is an international non-governmental organisation of rail transport. The idea of creating an international organisation, bringing together the railway companies, was developed in the wake of the international conference of Portorosa, in Italy on 23 November 1921, followed by the international conference of Geneva on May 3rd, 1922.

Of note is the establishment of the Bucharest Railway Institute in 1950. The official C.F.R. bulletins referred to the mandatory participation in courses to specialize and obtain the necessary certifications for safely conducting activities related to Romanian railways.

Safety in the period 1945-1965, during Gheorghe Gheorghiu Dej's communist regime: Despite limitations imposed by low funding and a centralized communist policy, Romania's railway transport transitioned to more advanced technology and implemented modern solutions focused on increasing safety and operational efficiency. Diesel locomotives were introduced, with significant advantages compared to steam locomotives. They offered greater reliability, easier maintenance, and lower risks of explosions or fires than steam engines.

Toward the end of this period, with the beginning of railway electrification, electric locomotives appeared, offering greater energy efficiency and having a positive impact on railway safety due to more advanced control systems (Tîrpe, 2015). For passenger wagons, metal wagons replaced wooden ones, offering better protection in case of impact or fire. Freight wagons also saw material changes, with designs becoming more robust, reducing the risk of damage and accidents.

The modernization of air brake systems continued, along with automatic coupling, becoming a standard feature for all types of trains. The invention of new steel processing techniques ensured better rail construction, capable of supporting increased weight and speed, adapting to the economic and technological demands of the time (*Locomotiva Electrică Cu Motoare de Curent Alternativ*, n.d.).

The period 1965-1989. The Romanian Railways continued to serve as an image vector for the Communist Party, which, with the support of the state budget, continued to modernize and develop. Due to competition with other communist states, in 1969, the General Secretary of the Romanian Communist Party decided that in the following five-year plan there should be an increase in double railway lines, as Romania had only 6% of total railways, compared to Czechoslovakia 20%, Poland 24%, and France and West Germany 41% (Botez et al., 1977). This political decision led to the modernization of tracks, locomotives, and wagons,

while several other technical measures were adopted to place Romania in a leading position in Europe regarding railways. By the end of 1975, nearly all locomotives were diesel and electric, a unique aspect compared to other rail networks similar to Romania's.

The operational principle of Romanian Railways during these years was in line with the Communist Party's directives, with economic principles subordinate to political ones. Despite this, the period was marked by technical modernization, discipline, and a focus on passenger safety as a primary goal. Even though professional leadership was doubled by political leadership, the decisions of the former always prevailed (Nahaiciuc, 2020).

In 1980, the Collaboration of Railway Police and Security Services (COLPOFER) was established, when a group of railway companies and railway police – a public-private partnership – decided to join forces and form a European association whose mission was to improve railway safety, adopt a common railway security strategy, develop recommendations for enhancing safety in the railway environment, and increase public perception of railway safety (*COLPOFER - Collaboration of Railway Police and Security Services*, n.d.).

In 1989, The Southeast Europe Railway Group (SERG) was founded as a component of International Union of Railways (UIC), with member countries including Romania, Albania, Bulgaria, Macedonia, Greece, Turkey, Serbia, and Montenegro. Among its priorities was improving railway security, and for the participating countries, it was a significant responsibility to ensure traffic security in the Balkans (Djaleva, 2008).

Safety in the period 1965-1989, under Nicolae Ceaușescu's communist regime: This period saw intensive modernization of rolling stock in Romania, with the goal of ensuring safe and efficient transport. The focus was on the near-complete electrification of the railway network and the widespread introduction of diesel and electric locomotives. For the few non-electrified lines, diesel locomotives with the latest technology were used, providing increased reliability, greater safety, and better manoeuvring power, contributing to operational efficiency and minimizing the risk of accidents (Matei-Stefan, 2022).

Romania became a producer of electric locomotives, with their quality and safety being recognized by the UIC. Passenger wagons were better compartmentalized to reduce the risk of injury to passengers in case of collisions, and the materials used were fireproof to reduce the risk of fire. Similarly, the same materials were used for freight wagons. These also saw specialized design, with wagons designed for specific types of cargo, such as tank wagons for flammable liquids and refrigerated wagons for perishable goods, meeting UIC safety standards (Balogh, 2011).

Braking systems improved with the introduction of regenerative electric brakes for electric locomotives, which also provided increased energy efficiency (Liudvinavičius & Lingaitis, 2009). The emergence of new steel manufacturing technologies and the use of concrete sleeper technologies contributed to the safety and durability of embankments, bridges, and tunnels.

Post-communist period 1990-2007. Following the changes brought by the 1989 Revolution, the Romanian Railways collapsed, along with most industrial activities, whose drastic reduction was quickly felt. For this reason, CFR's freight transportation was no longer in demand. Unfortunately, shortly after, the unused and unguarded rolling stock became a prime target for scrap metal thieves, reducing it in a relatively short period. There were also many layoffs, which led to a decrease in passenger traffic (Nahaiciuc, 2020).

In 1991, the National Society of Romanian Railways was established, starting a reform and restructuring process the following year. In the same year, changes were made through *Law 61/1991 on sanctioning acts of violating social coexistence norms, public order, and tranquillity*, and Article 2 specifically addressed railways to ensure citizens' safety.

The process of reforming the railway sector began in 1998, based on *Emergency Government Ordinance no. 12/1998* (Guvernul României, 1998) regarding the transport on Romanian railways and the reorganization of the National Society of Romanian Railways.

Through *Government Decision 626/1998*, the Romanian Railway Authority (AFER) was established, which includes the Romanian Railway

Safety Authority (ASFR), the Romanian Notified Body for Railways (ONFR), and the Romanian Railway Licensing Body (OLFR). AFER is responsible for, among other duties, authorizing railway infrastructure managers in matters of safety, licensing and certifying railway transport operators in terms of safety, and monitoring, promoting, and developing the regulatory framework in the field of railway safety. In 2003, AFER joined COLPOFER, and since 2004, it has participated in the working group on "Security in Freight Railway Traffic."

The issue of railway safety became one of the most urgent after the terrorist attacks in Madrid on March 11, 2004, and in London in 2005. Every new threat to the sector increases the responsibility of government bodies and transport companies for the lives of people traveling by train and/or waiting in stations.

The new realities require new, much more efficient decisions. The old regulations, developed under the conditions of the 20th century, did not take into account either the new risks or the use of modern technologies (DJaleva, 2008). Romania aligns with international railway safety standards and adopts *Law no. 55* of March 16, 2006, regarding railway safety (Parlamentul României, 2006). During this period, autonomy is no longer a concept associated with the railways, as they continue to be supported by the state budget. However, the institution was led by politicians who were indifferent and unfamiliar with the railway sector, and the results of this leadership are still evident today. As politicians in the rest of Europe understood the environmental, safety, and economic efficiency advantages of railway transport, countries began to direct their resources toward the development of railway infrastructure. Thus, in 2007, with Romania's entry into the EU, the country also began familiarizing itself with these concepts, which were to be applied.

Safety in Post-communist period (1990-2007): The significant transformations that Romania underwent also impacted railway infrastructure. Railway financing decreased, and the modernization process continued at a very slow pace. Modern diesel-electric locomotives appeared, contributing to reducing pollution and saving fuel. Advanced

new models of electric locomotives were brought to Romania, providing better economic performance and increased railway safety factors. New passenger wagons appeared, equipped with air conditioning, comfortable seats, and modern amenities for passengers.

However, the lack of budget allocations for line maintenance and modernization led to the aging of materials used and an increased risk of accidents. Special attention was paid to aligning the Romanian railway system with European Union standards and regulations, implementing safety, environmental protection, and interoperability norms to facilitate integration into the European railway network.

Conclusions

The aim of this article was to emphasize that the modernization of rolling stock, technological developments, and innovations have contributed to improving railway security, offering a high level of safety in the operation of rail transport. Based on our analysis we can conclude that innovations and modernizations have been essential for reducing accidents, protecting passengers and goods, providing a safer working environment for railway personnel, and ensuring infrastructure protection and durability. The transition from rudimentary technologies to more advanced and reliable systems happened gradually, with safety playing a key role in ensuring the development of the railway industry. Furthermore, the impact of modernizing materials used has been positive for railway security. The more than 155-year history of Romanian railways shows the driving force this sector has had on the country's progress, starting from the economic and technical areas. After prolonged efforts, the country's politicians succeeded in finding the necessary financial resources to establish the first railways.

A fascinating finding of our research is the fact that the need to take care of passengers and cargo has existed since the inception of railway transport. This concerned not only the engineering aspect of security, which today is commonly referred to as "safety," but also issues related to protecting people from theft, fraud, violence, and goods from damage and theft. Although some experts believe that the understanding of the dual nature of security has emerged only recently, national

regulations and international agreements from the second half of the 19th century contained ample evidence of efforts to mitigate criminal acts on trains and in stations (DJaleva, 2008).

The issue of railway security is an area that connects almost all stakeholders in the industry, while also involving traffic participants who affect railway infrastructure. Among the issues that arise in the area of railway safety are those related to railway transport technology and techniques, procedures and regulations used, as well as due to inadequate procedures and regulations, and improper handling of issues by employees, stemming from a lack of necessary knowledge, attitudes, and bad habits (Burdzik et al., 2017). The railway infrastructure has been an attraction for the leaders of the new Romanian state from the very beginning, as they understood that the state's economic development could not happen without the development of the railways. Through the measures adopted by the authorities, the aim was to develop railway transport to achieve economic and social growth corresponding to each period mentioned above.

The initial railway legislation, adopted and enacted by the parliament of that time, was modelled after the French system, and lawmakers adapted it to the needs of the new Romanian state, so much so that no further changes or amendments were needed for approximately 50 years. Romania's railway development took place because the politicians of the time saw the impact of railways abroad and understood that it could have the same or even greater importance in the United Principalities. Several goals were pursued, starting with the economic one, followed by the military and national goals, as the railways physically connected the two Romanian Principalities, and after World War I, the other provinces as well. The tourism and social goals aimed at the development of all localities, leading to unified development.

In this context, our article also emphasizes that railway development cannot be separated from the concept of security for citizens, employees, and infrastructure. As we can observe, lawmakers, in addition to legislation for the creation and development of infrastructure, also approved laws regarding the proper operation of activities under increased security conditions. At the same time, emphasis was placed

on protecting passengers, employees, and infrastructure by adopting rules and regulations addressing possible security incidents: accidents, vandalism, theft, etc.

The interwar period is characterized by autonomy. This aspect favoured the implementation of internal rules and regulations regarding the staff structure of the Romanian Railways Directorate, where only the best specialists were promoted to leadership positions. This also reflected in the development of the railway structure, with a significant number of kilometres of railway being constructed.

After World War II, nationalization occurred, along with the political plan (the five-year plan) of the Romanian Communist Party, which focused on technological development, ensuring increased safety in freight and passenger traffic.

After 1989, the railway industry declined due to the reorientation of transport policies toward the road sector. Starting in 2005, following the terrorist attacks on railway infrastructure in the capitals of Madrid and London, the security paradigm shifted, and European states became aware of the need to implement new measures in railway security and resilience.

In conclusion, the modernization and technological advancements in railway systems have proven essential in enhancing both the safety and security of rail transport. From the early efforts of Romanian lawmakers and engineers to the recent focus on countering modern threats like terrorism, the railway sector has continuously evolved to address emerging security challenges. These improvements have not only reduced accidents and protected infrastructure but have also played a significant role in fostering economic and social development. The historical and ongoing commitment to ensuring a secure and efficient railway system underscores its vital importance to national progress and resilience.

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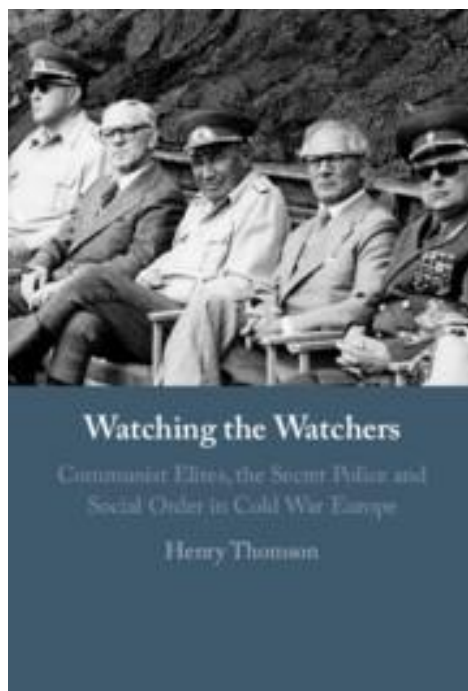
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REVIEWS AND NOTES

Henry Thomson, (2024), *Who Watches the Watchers. Communist Elites, the Secret Police and Social Order in Cold War Europe*. Cambridge: Cambridge University Press. 339 pp. presented by Mihaela TEODOR*



Henry Thomson, an accomplished political economist expert specializing in economic development and political transitions, published earlier in 2024, at Cambridge University Press its latest volume *Who Watches the Watchers. Communist Elites, the Secret Police and Social Order in Cold War Europe*, which is a compelling exploration

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of the “guardianship dilemma in authoritarian regimes”, as other reviewers stated.

The author currently serves as an Associate Professor in the School of Politics and Global Studies at Arizona State University with a research focus on economic development, authoritarian rule, and transitions to democracy. He completed his Ph.D. in Political Science at the University of Minnesota (See more on <https://search.asu.edu/profile/3140896>). His research continues to contribute valuable insights into the dynamics of authoritarian regimes and their transitions to democracy¹.

The book *Who Watches the Watchers* dives into the intricate relationship between communist elites and secret police agencies during the Cold War. The book has a linear structure with: four parts (Part I. Introduction and Theory; Part II. Comparative Historical Analysis; Part III. Cross-National Quantitative Analysis; Part IV. Conclusion), nine chapters (1. Introduction; 2. Theory; 3. Introduction to part II; 4. The Polish People’s Republic; 5. The German Democratic Republic; 6. Introduction to part III; 7. Elite cohesion and coercive agent tenure; 8. Officers and secret informants; 9. Conclusion), and three appendices (A: Secret police agencies and chiefs; B: Survival analysis; C: Agency size analysis). Thus, the volume highlights the importance of elite cohesion in maintaining control over coercive agents and preventing potential threats to the regime’s survival².

Thomson emphasizes the pivotal role of elite cohesion in shaping the trajectory of authoritarian regimes. A high degree of elite cohesion enables the regime to maintain control over coercive institutions, thereby facilitating the expansion of state capacity to implement policies,

¹ He has authored two books: *Who Watches the Watchers: Communist Elites, the Secret Police and Social Order in Cold War Europe* (2024) and *Food and Power: Regime Type, Agricultural Policy and Political Stability* (2019). Source: <https://search.asu.edu/profile/3140896>.

² Read more about the volume *Who Watches the Watchers: Communist Elites, the Secret Police and Social Order in Cold War Europe* (2024) on <https://www.cambridge.org/no/universitypress/subjects/politics-international-relations/russian-and-east-european-government-politics-and-policy/watching-watchers-communist-elites-secret-police-and-social-order-cold-war-europe?format=HB>

oversee security forces, and allocate resources to enhance coercive capabilities, and the capacity for the suppression of dissent. Intra-elite divisions can impede the regime's ability to effectively oversee coercive agents, resulting in constraints on the expansion of secret police forces. His cross-national statistical analyses further reinforce his arguments, demonstrating how elite cohesion influences the tenure and growth of security officials, staff, and informants.

Through detailed case studies of East Germany and Poland, Thomson traces the causal pathways that explain variations in the stability and effectiveness of coercive institutions. In this respect, Thomson looks at what happened after Stalin died to understand how leadership changes can affect authoritarian regimes. Thomson tests this argument with an innovative multi-method research design, including difference-in-differences analysis and comparative historical case studies. He provides a nuanced understanding of the coercive capacity of Communist dictatorships in Eastern and Central Europe, starting with a simple idea: dictators must rely on coercive agents for repression, but doing so creates a problem, the coercive agents themselves can become a threat to the dictator's survival. Thomson's multi-method research design offers a sophisticated analysis of the complex relationship between dictators and their coercive agents in Communist regimes. Henry Thomson explores the differences in the coercive capacity of Communist dictatorships in Eastern and Central Europe, the book being a deep dive into the mechanisms of control and surveillance employed by authoritarian regimes in this region. Thus, the author offers readers a nuanced understanding of how these states maintained social order through coercive means.

In conclusion, the author leverages his expertise in political economy to dissect the interplay between elite cohesion and the coercive capabilities of the state. The volume provides both strong theoretical foundations and robust empirical evidence. Thomson's work constitutes a significant contribution to the scholarly literature on authoritarian politics. Moreover, *Who Watches the Watchers. Communist Elites, the Secret Police and Social Order in Cold War Europe* is essential reading for understanding authoritarian politics in Cold War Europe.

Claudia Anamaria IOV, (2020), *Rethinking (In)Security in the European Union: The Migration-Identity-Security Nexus*, Cambridge Scholars Publishing. 289pp., presented by Rareș-Alexandru VĂSCAN¹



A Scientific Researcher with over 12 years of experience in the field of international relations and also a university lecturer with a career spanning more than 10 years in security studies at Babeș-Bolyai University in Cluj-Napoca, Claudia Anamaria Iov, author of the book *Rethinking (In)Security in the European Union: The Migration-Identity-Security Nexus*, presents in this ambitious, well-documented work an

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approach to the complex relationship between migration, identity, and security within the European Union, particularly in the case of the Roma minority. This examination is set within a broad context marked by geopolitical shifts and waves of migration, which are seen as challenges to European security. The book *Rethinking (In)Security in the European Union: The Migration-Identity-Security Nexus* is based on Claudia Anamaria Iov's doctoral thesis, in which she set out to examine and address east-to-west migration and the issues faced by the Roma ethnic minority in France, thereby highlighting the numerous social tensions and interactions that label intra-EU migration *as a meta-problem for destination states*.

Rethinking (In)Security in the European Union: The Migration-Identity-Security Nexus stands out from the outset with a holistic approach to the theoretical framework under scrutiny – namely, “security” – and with an effort to clarify and define the concept of security, considering the evolution and transformations it has undergone through the perspectives shaped by different schools of thought and the international scene. Moreover, in my view, this book addresses, introduces, and delves deeply into the theme of societal security in a logical manner, well-supported with genuine examples, along with an exploration of how cultural elements can be used as tools within security policies.

Rethinking (In)Security in the European Union: The Migration-Identity-Security Nexus, noted as a bold piece of research from the outset due to the objectives set forth by the author, Claudia Anamaria Iov, offers a rigorous analysis through a transdisciplinary approach structured into two distinct, theoretically and methodologically coherent sections. Each part contributes to an overarching goal, which, in my critical opinion, is to facilitate an understanding of the migration-identity-security triad, specifically concerning the Roma minority in France from 2007 to 2012.

The first chapter introduces the general field of security studies and international relations, presenting the new theoretical framework of the “umbrella” concept of security and illustrating how its meaning has been expanded by the new schools of thought from Copenhagen and Paris, extending beyond traditionalist and realist approaches. Although this book provides one of the most comprehensive explanations of societal security and security approaches, it also highlights the challenge

of formulating an exhaustive definition of the concept of security, given its dual nature – both objective and subjective.

In the second chapter, the author, Claudia Anamaria Iov, aims to offer a new perspective for research in the field of International Relations by closely examining the interdependence and causal relationship between migration, identity, and security. Her goal is to bring a novel element to this period by exploring the effects on the European Union's integration process. Through this approach, which emphasises the impact of migration on identity construction, security, and even the well-being of European societies, the author asserts that migration within the European Union is part of a "security continuum" where the boundaries between internal and external threats become blurred, arguing that migration effects have necessitated the integration of multiple once-distinct sectors into a single security issue.

The third chapter combines an objective characterisation of the Roma minority by presenting its history, culture, and traditions, which both define and preserve its group identity. This chapter's role is to provide a balanced and impartial analysis of the myths and folklore surrounding Roma identity, as viewed from various perspectives provided by Roma leaders and specialist researchers.

Chapter four examines and thoroughly reviews, with extensive documentation, the international legislative framework regarding the protection of ethnic minorities and human rights. In this part of her research, Claudia Anamaria Iov captures the influence of ethnic minority legislation on the relationships between majority and minority groups within European Union states.

The final chapter, which serves as the cornerstone of originality and distinction in comparison to other research within both International Relations and minority studies, provides a pragmatic yet critical analysis of the situation of the Roma minority with Romanian citizenship in France from 2007 to 2012. Throughout this chapter, the researcher introduces a new perspective on the Roma minority in France, which she terms the "poverty-migration-security complex," analysing it through the lens of social integration measures. Through this new complex, Claudia Anamaria Iov's chapter examines and presents the effects of European security policies on the Roma in France, combined with the

challenges of their integration process. The author also critiques securitisation practices, arguing that they erode and negatively influence the inclusion of the Roma minority.

In the conclusions of *Rethinking (In)Security in the European Union: The Migration-Identity-Security Nexus*, researcher Claudia Anamaria Iov, with her strong theoretical and professional expertise, highlights new research directions regarding the Roma minority within the context of the security complex. At the same time, the final section presents a series of potential scenarios for managing the Roma minority issue, along with a set of solutions that take into account the actors involved, the scale of the phenomenon, and the severity of the situation of the Roma, both in their countries of origin and in destination countries.

In an objective and appreciative manner, regarding the scope of the issue analysed, *Rethinking (In)Security in the European Union: The Migration-Identity-Security Nexus* contributes to the field of security studies and international relations through this comprehensive analysis of European perceptions concerning the Roma minority and their migration.

ACADEMIC FOCUS



**Empowering a Pan-European
Network to Counter Hybrid
Threats (EU-HYBNET)
H2020 Grant agreement
no: 883054
(May 2020 – April 2025)**

EU-HYBNET is a 60-month project (2020-2025), financed through the Horizon 2020, which start in May 2020. The project is being developed and implemented by a consortium of 25 partners, coordinated by LAUREA University of Applied Sciences from Finland. The European Centre of Excellence for Countering Hybrid Threats and the Joint Research Centre are leading partners of the EU-HYBNET project.

EU-HYBNET bring together practitioners and stakeholders to identify and define their most urgent requirements for countering hybrid threats, by undertaking an in-depth analysis of gaps and needs and prioritizing those that are crucial to address through effective research and innovation initiatives, including arranging training and exercise events to test the most promising innovations (technical and social) which lead to the creation of a roadmap for success and solid recommendations for uptake, industrialization and standardization across the European Union.

The project aims to build an empowered, sustainable network, which:

- define common requirements that can fill knowledge gaps, deal with performance needs, and enhance capabilities of innovation endeavors;
- monitor significant developments in research and innovation;
- deliver recommendations for uptake and industrialization of the most promising innovations that address the needs

of practitioners, and determine associated priorities for standardization;

- establish conditions for enhanced interaction among its members;
- persistently strive to increase its membership and continually build network capacity through knowledge exchange.

EU-HYBNET address four core themes to ensure coherence in the project's results: 1) Future Trends of Hybrid Threats, 2) Cyber and Future Technologies, 3) Resilient Civilians, Local Level and National Administration and 4) Information and Strategic Communication.

Romania represents the consortium through "Mihai Viteazul" National Intelligence Academy (MVNIA). MVNIA incorporate the project's research findings and information into its MA & PhD research programs. As students come from diverse areas (security practitioners, legal, media, private business), the impact of exploitation of the information reach a wide audience, and the EU-HYBNET training documents will also be employed to enhance capabilities of experts and practitioners in the fight against hybrid threats.

EU-HYBNET is a Pan-European network of security practitioners, stakeholders, academia, industry players, and SME actors across EU, collaborating with each other to counter hybrid threats.

Erasmus+ Mobility Projects at “Mihai Viteazul” National Intelligence Academy

In June 2024 „Mihai Viteazul” National Intelligence Academy (MVNIA) completed its 4th academic mobility project (KA131_2022) dedicated to the countries participating in the ERASMUS+ programme. The aforementioned project came as a natural follow-up to the KA103 mobility projects carried out in 2019 and 2020, respectively KA131 in 2021.

The objectives pursued within the KA131_2022 mobility project, a new stage in the development of the international dimension of MVNIA, were aligned with those stated in the Erasmus Guide and those established at the time of submitting the application for the Erasmus Charter: (1) promote lifelong learning by supporting four participants to improve the level of key competences (professional, cultural, linguistic); (2) increase the visibility of our institution among the European university community and exchanging good academic practices with other higher education institutions with similar profiles; (3) promote diversity, inclusion, equal opportunities and excellence; (4) improve the international dimension of vocational education and training through a better understanding of the practices, policies and education systems in the partner countries, thus contributing to the strengthening of a European Education Area; (5) increase the capacity the efforts to digitize the learning and teaching process, in a lingua franca, for a better adaptation to the requirements of the digital age; (7) foster and expand the previously established relations with higher education institutions and create new opportunities for training and promoting the accumulated knowledge through projects that will be submitted under other key actions.

MVNIA is actively involved in improving the quality of higher education, both nationally and internationally, considering the uniqueness of the study programs offered. From this perspective, we believe that the

partnership with higher education institutions with a similar profile through the funding offered within the KA131 mobility programme allow us to permanently orient ourselves towards streamlining activities and improving results in order to contribute to the development and consolidation of the European Education Area in the sector dedicated to security studies and international relations. The impact of the project implementation has had a ripple effect that was felt at all levels, ranging from the beneficiaries to the institutional one.

Moreover, the effects of the project have already become visible in processes such as updating the course and seminar materials used in the teaching process for those who were beneficiaries of the teaching and training mobilities, or in the integration within the teaching process of new methods (e.g. gamification) that were picked up following various training mobilities.

It is beyond the shadow of a doubt that the 4th university mobility project has: led to an increase in the prestige and visibility of the MVNIA at national and European level; has allowed the strengthening of European partnerships, especially with Jagiellonian University from Krakow, Poland; has allowed the exchange of good practices, with facilitating the significant development of the professional, linguistic and intercultural competences of the participants.

Collectively, the four ERASMUS+ projects that have been implemented so far have encompassed a number of 14 beneficiaries students and professors alike, who took part in different types of mobilities, as follows:

- 6 training mobilities;
- 4 traineeships;
- 2 teaching mobility
- 2 study mobility.

Moreover, MVNIA is currently implementing two more Erasmus+ KA131 mobility projects for which it has received funding under the 2023 and 2024 calls, respectively.



**Prevention of Weaponization and Enhancing Resilience against
Security-related Disinformation on Clean Energy – POWER
Grant agreement no. 2024-1-RO01-KA220-HED-000245038
(2024 – 2027)**

POWER Project addresses the fight against climate change by mitigating the effects of clean-energy-related disinformation on public policy adoption and implementation among both the target group and the general public. The project directly tackles two crucial societal challenges: climate change and the pervasive issue of disinformation, particularly around renewable energy. By engaging students, educators, and professionals across Romania, Malta, Spain, and Moldova, it aims to elevate media and clean energy literacy, foster a comprehensive understanding of environmental issues, thus enhancing resilience against disinformation.

The project consortium is headed by “Mihai Viteazul” National Intelligence Academy and the partners are University Rey Juan Carlos, Spain, the University of Malta, Eurocomunicare Association. The project also has an associated partner The Center for Strategic Communication and Countering Disinformation, in the Republic of Moldova.

The project’s first general objective is to facilitate transition to clean energy by fostering an informed fact-based public discussion on clean energy sources. In correlation, the second general objective is to strengthen societal resilience against the weaponisation of clean energy conversations by disinformation actors, and to contribute to the EU’s policy objectives to reduce net greenhouse gas emissions by 55% by 2030 and to generate at least 42.5% of the EU’s energy from renewable sources.

These objectives have been broken down into six specific objectives: (1) to develop a lexicon related to clean energy and associated concepts in Romania, Spain, Malta and the Republic of Moldova in the target languages; (2) to map online disinformation *modus operandi*, techniques, and narratives in the four participating countries. The project will collect and analyse automatically and manually clean-energy-related disinformation narratives on three social media platforms. The results of both these research activities will represent the basis of the clean-energy lexicon; (3) to neutralize clean energy disinformation through dynamic science communication in Romania, Spain, and Malta; (4) to enhance clean energy and media literacy among students, teaching staff and employees of the partner organizations. These results will be achieved through organizing three, five-day, face-to-face Clean Energy Cafes as learning events which bring together students in the fields of security, intelligence, communication, social sciences, and sciences with teaching staff and employees in the same areas and are designed as experiential, learning-by-doing activities; (5) to foster a collaborative empowered community of practice among students in the partner organizations and local universities by organizing four three-day face-to-face Clean Energy Living Labs dissemination activities in each partner country. In these labs, participants will work together to design innovative, artistic, digital productions to increase clean energy literacy and preempt disinformation; (6) to create and populate digital educational content and tools addressed to stakeholders in the four partner countries. This e-learning hub will include a Practitioner's Digital Briefcase, an Educator's Digital Briefcase, digital storylines, online learning modules. These will foster the development of new teaching and learning practices through digital content and interactive learning resources.

At the heart of this initiative is the development of innovative educational content and digital tools. This includes a clean energy lexicon, immersive learning scenarios, and digital storylines, all designed to debunk myths perpetuated by disinformation campaigns about renewable energy. The approach integrates cutting-edge research, participatory teaching methodologies, and broad dissemination activities, such as Clean Energy Living Labs and Clean Energy Cafés.

Key to the strategy is the cross-sectoral collaboration that leverages the expertise of the partner organizations with a proven track record in digital education, fighting against disinformation and environmental projects. By creating synergies between media literacy, environmental education, and digital pedagogy, POWER not only addresses the selected priorities head-on but also pioneers a holistic model for tackling complex global challenges.



**DNS4EU and European DNS
Shield – 21-EU-DIG-EU-DNS**

Grant agreement no.

101095329

(01.01.2023 – 31.12.2026)

The Romanian National Cyber Security Directorate (DNCS) is the beneficiary of a non-reimbursable financing for the implementation of “DNS4EU and European DNS Shield – 21-EU-DIG-EU-DNS” 36 months-project financed through granting authority: European Health and Digital Executive Agency (Hadea), under the call CEF-DIG-2021-CLOUD topics, type of action: Connecting Europe Facility Infrastructure Projects.

The overall objective of the project is to *strengthen European technology sovereignty* offering and significantly improve the situation with recursive DNS servers in Europe. DNS-EU offers to EU citizens, businesses, and public administration a *comparable alternative to global services* such as Google or Cloudflare, but to go further and become a leader supporting newest technologies and standards while respecting a high level of security and privacy.

The DNS recursive service will be available for all internet users in Europe. The DNS4EU cloud resolver will be running in at least 14 localities in 13 various countries across the EU. Expected performance of the DNS4EU Cloud resolver is way above 1 million requests per second.

From the technological point of view, the project combines cloud and on-premises components delivered through publicly available resolvers and thanks to introduction into ISPs networks. This shall secure a significant adoption rate among residential, corporate, and public end-users in the EU. The maturity of the solution will be ensured by adopting latest security and privacy-enhancing standards.

The DNS will be easy to configure by the end users and supported via a wide range of applications and operating systems and will provide focused security protection for EU countries against malware and phishing without sacrificing speed and stability. The service will strictly be following EU privacy requirements.

The project aims to develop widely recognized solution that will be used by at least 100 million users across Europe over 5 years, 35 million of them during the project. This will disrupt the dominance of the current players. The consortium believes that thanks to its technological maturity and targeted communication activities, the project will become one of the successful flagships, like the .eu domain or eIDAS, which will set the direction not only in Europe but also globally.

Role of The Romanian National Cyber Security Directorate (DNSC) in the DNS4EU project. The Romanian National Cyber Security Directorate (DNSC) is specialised body of central public administration, subordinated to the Government and in the coordination of the Prime Minister, with legal personality, financed entirely from the state budget, through the budget of the General Secretariat of the Government.

At the national level, DNSC is the competent authority for the national civilian cyberspace, including the management of risks and cyber incidents. DNSC performs functions and responsibilities such as: national CSIRT; cyber security incident response team for IT products and services used in the government sector; national cyber security certification authority; analysis and forecasting; identification, evaluation, monitoring and mitigation of cyber risks at national level; the management function of projects and services for activities; research and development; strategy and planning; cooperation and collaboration; alerting, prevention, awareness, and training; national competent authority for regulation, supervision, and control.

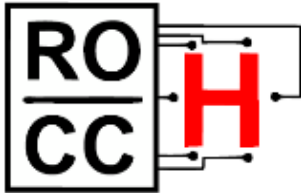
In the DNS4EU and European DNS Shield Project we're dedicated to create user-friendly guides and materials, (interactive web application and audio-visual materials) and other support material with clear instructions for setting up DNS for individual devices such as browsers, operating systems (including mobile), home routers or smart home devices (e.g. game consoles). Our commitment extends to provide clear

instructions and ensuring accessibility, and enhancing cybersecurity for EU Citizens.

We focus to ensure compliance with lawful filtering requirements by developing automated tools to streamline the process, preparing tools for automated coverage of the lawful filtering requirements including the lists of the domains and the proper wording for the blocking page and providing a platform that allows ISPs and DNS4EU to take a burden of lawful filtering compliance off them. That will have the capability to automatically update the blacklists and allow us to meet the national requirements. Also, we will assess operational security requirements, reporting platform compliance with legal security standards, and ultimately, operationalizing the platform while meeting cybersecurity criteria.

Considering our expertise as part of CSIRTs Network, DNSC's participation in the DNS4EU project will strengthen the collaboration with CERTs and CSIRTs at European level, endorsing their participation to enhance threat intelligence exchange, effectively addressing both global and local cybersecurity threats.¹

¹ We thank PhD Claudia Lascateu for the presentation. Please see more details about the journal on www.joindns4.eu



**Romanian Cyber Care Health
(RO-CCH) CNECT.H – Digital
Society, Trust, and
Cybersecurity
Grant agreement no.**

101101522

(January 2023 – March 2025)

The Romanian National Cyber Security Directorate (DNSC) is the beneficiary of a non-reimbursable financing for the implementation of the “Romanian Cyber Care Health - RO-CCH” project that is a 27-month project (2023-2025), financed through CNECT.H – Digital Society, Trust, and Cybersecurity, under the call DIGITAL-2022-CYBER-02-SUPPORTHEALTH topics, type of action: Digital SME Support Actions.

The Romanian Cyber Care Health – RO-CCH project will support cyber security resilience in the Romanian healthcare system and health institutions, which have been put under stress over the recent years, especially further to the COVID-19 crisis, in view of limiting the damage of safety-critical cyber security incidents which have affected health institutions and health services providers. The overall objective is to reduce cyber security risks to increase patient trust and safety in healthcare and health institutions.

The project will support cross-fertilisation among cyber security and healthcare communities of practices in order to increase the awareness of cyber security threats affecting healthcare and health institutions and to define collaboratively multi-disciplinary cyber security training schemes tailored to healthcare and health institutions environments and related healthcare system stakeholders, hence

establishing the foundations for cyber security skills in health sector across the European Union.

It is expected that market-ready innovative cyber security solutions will be adopted, including provisions developed in the framework of EU-supported research and innovation projects. Furthermore, healthcare and healthcare institutions (SMEs in particular) will be equipped with up-to-date tools to protect themselves against cyber threats, as well as revised data sharing practices to improve security collectively. All these aspects are predicted to make a significant contribution to the overall Digital Europe Programme objectives.

The aims of the project titled "Romanian Cyber Care Health (RO-CCH) are:

- Reducing cybersecurity risks in the healthcare sector of Romania, focusing on protecting patient privacy and sensitive healthcare data from cyberattacks and human errors.
- Supporting the implementation of objectives under the NIS Directive for Romanian healthcare institutions, especially considering the increasing risks due to digital technology use, including big data, artificial intelligence, and machine learning.
- Promoting awareness and education in cybersecurity, not only within the healthcare sector but also among the general public, including children, to foster a culture of cybersecurity awareness.
- Increasing resilience against cyber threats and improving the healthcare system's capacity to manage and limit the impact of cyber incidents, especially given the pressures from events like the COVID-19 pandemic.
- Encouraging cross-border solutions and promoting the sharing of best practices and tools within the cybersecurity and healthcare communities to tackle vulnerabilities more effectively.

The RO-CCH project involves implementing an on-line designated application to enhance cybersecurity awareness and risk management within Romania's healthcare sector, aiming to provide tools and training to healthcare practitioners and end-users to safeguard patient data and healthcare services.

These efforts are intended to increase patient safety and trust in the Romanian healthcare system by addressing the cybersecurity challenges faced by healthcare providers and institutions.

The RO-CCH project² aims to reduce cybersecurity risks and enhance resilience in Romania's healthcare sector by addressing vulnerabilities related to digital technologies and human errors, while supporting the implementation of the NIS Directive. The project also focuses on raising awareness of cybersecurity threats, sharing best practices, and promoting cross-border collaboration to improve patient safety and trust in healthcare institutions.

² We thank PhD Claudia Lascateu for the presentation. Please see more details about the journal on <https://dnsc.ro/project-ro-cch>

Studia Securitatis Journal

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Journal Overview. Founded in 2007, *Studia Securitatis Journal* is a peer-reviewed academic journal dedicated to the field of security studies, primarily focused on topics related to national security, international relations, defence policies, and various dimensions of security studies. It serves as a platform for scholars, researchers, and professionals in the field to disseminate their findings, analyses, and theoretical discussions on a wide array of security-related topics. It is published biannually by the Lucian Blaga University of Sibiu, Faculty of Social Sciences and Humanities, under the Research Centre in Political Science, International Relations and European Studies, and the Department of International Relations, Political Science and Security Studies. The journal has evolved from its origins in the Faculty of Political Science, International Relations and European Studies, reflecting its strong academic foundation and commitment to advancing the discourse on security.

Indexing and Affiliations. *Studia Securitatis Journal* is internationally recognized and indexed in several databases, enhancing its visibility and academic impact. These include: ERIHPLUS, CEEOL, DOAJ, EBSCO, INDEX COPERNICUS, ULRICH'S PERIODICAL DIRECTORY,

INFOBASE INDEX, SOCIONET, RESEARCHBIB, MIAR, and GLOBAL IMPACT & QUALITY FACTOR.

Scope and Focus. *Studia Securitatis Journal* encompasses a broad range of security-related topics, offering critical analyses at the international, national, community, and private levels. It provides a multidisciplinary platform for exploring security through various lenses, including military, economic, social, political, environmental, and cultural perspectives. The journal also covers emerging areas of concern, such as AI systems, cybersecurity, public diplomacy, misinformation, hybrid warfare, and more. The thematic diversity ensures that the journal remains at the forefront of contemporary security studies. It covers a broad spectrum of security-related issues, including but not limited to:

- **National Security.** Articles and research papers exploring the strategies, policies, and challenges faced by nations in safeguarding their sovereignty, territorial integrity, and public safety.
- **International Relations and Global Security.** In-depth analysis of geopolitical dynamics, international conflicts, peacekeeping operations, and the role of international organizations like the UN, NATO, etc., in maintaining global peace and security.
- **Hybrid Warfare. Cyber Warfare.** The effects of cyber-attacks in hybrid strategies, including examples of state-sponsored hacking, ransomware, and cyber espionage. The implications for national security and critical infrastructure; *Information Warfare and Propaganda* - the use of disinformation, fake news, and psychological operations to influence public opinion, undermine governments, and destabilize societies. *Economic Warfare* - economic tools, such as sanctions, trade wars, and financial manipulation, are used in hybrid conflicts to weaken adversaries. *Irregular Forces and Proxy Wars* - the use of non-state actors, militias, and private military companies in hybrid warfare to achieve strategic objectives without direct confrontation.

- **Defence and Military Studies.** Analysis on defence policies, military strategies, the development and procurement of defence technologies, and the role of armed forces in national and international contexts.
- **Terrorism and Counterterrorism.** Analyses of terrorist organizations, radicalization processes, and the various counterterrorism strategies employed by states and international coalitions.
- **Human Security.** Exploration of security from a broader perspective, including human rights, environmental security, food security, and public health as elements of global security.
- **International Public Law, International Humanitarian Law (IHL) and Armed Conflicts, Human Rights Law.** Provides a robust framework to explore various global security issues, particularly in the realms of peace, conflict resolution, human rights, and the role of international organizations. The impact of international legal frameworks on modern conflicts, such as the laws governing cyber warfare and autonomous weapons.
- **Security in Emerging Technologies (AI, IoT, Blockchain).** Studies related to the way how these technologies are reshaping the security landscape, creating new threats and vulnerabilities while also offering innovative solutions. This makes them critical subjects for security studies.

Theoretical and Methodological Contributions. Articles contribute to the theoretical frameworks and methodologies used in security studies, offering new approaches to understanding and analysing security issues.

Audience and Accessibility. The primary audience of *Studia Securitatis Journal* includes academics, researchers, policymakers, defence and security professionals, scholars of security studies, political science and international relations, and anyone with a deep interest in security studies. The journal is tailored for a global audience of academics, researchers, journalists, academia, and experts from both governmental and non-governmental organizations. In alignment with

its mission to promote open access to research, *Studia Securitatis* does not impose any article processing charges (APCs) or submission fees, ensuring that financial barriers do not hinder the dissemination of knowledge. Authors retain copyright over their work, and articles are published under a Creative Commons license, making them freely accessible to the public.

Peer Review Process. As an academic journal, *Studia Securitatis* likely employs a peer-review process to ensure the quality and credibility of the articles it publishes. This process involves experts in the field reviewing submissions for originality, methodological rigor, and contribution to the field before they are accepted for publication.

Availability. The journal is accessible in online formats, allowing for a broader dissemination of its content. The online ISSN (L 2821-5966) indicates that it has a digital presence, making its articles accessible to a global audience via academic databases, libraries, or the journal's own website.

Contribution and Impact. *Studia Securitatis Journal* plays a significant role in advancing the study and understanding of security issues. By providing a scholarly platform for the exchange of ideas and research, it contributes to the ongoing debates and developments within the field of security studies. It also helps bridge the gap between academic research and practical policymaking, offering insights that can inform and shape security strategies at both the national and international levels. Overall, *Studia Securitatis Journal* is a vital resource for anyone involved in or studying the multifaceted world of security, offering cutting-edge research and analysis on some of the most pressing issues of our time.

Collaboration between *Studia Securitatis Journal* and the International Conference “Human Security. Theoretical Approaches and Practical Applications”³. Starting from 2022, this represents a significant partnership in the field of security studies. This collaboration aims to bridge the gap between academic research and practical solutions in addressing contemporary security challenges. The International

³ Source: <https://conferences.ulbsibiu.ro/hstapa>

Conference “Human Security. Theoretical Approaches and Practical Applications” serves as a vital forum where theoretical frameworks and real-world applications converge. Participants from diverse backgrounds, including academia, government, and non-governmental organizations, gather to discuss pressing security issues such as human rights, conflict resolution, and sustainable development. Through this collaboration, selected papers and key insights presented at the conference are published in the December issue of *Studia Securitatis Journal*, providing wider dissemination of cutting-edge research and innovative solutions. This partnership not only enhances the academic discourse on human security, but also promotes the practical implementation of these ideas in policymaking and on-the-ground initiatives. Overall, the synergy between *Studia Securitatis Journal* and the International Conference “Human Security. Theoretical Approaches and Practical Applications” enriches the field of security studies by fostering a dynamic exchange of knowledge that is both theoretically sound and practically relevant.⁴

⁴ We thank Lecturer Nicoleta Munteanu for the presentation. Please see more details about the journal on <https://magazines.ulbsibiu.ro/studiasecuritatis/>

CALL FOR PAPERS ROMANIAN INTELLIGENCE STUDIES REVIEW

“Mihai Viteazul” National Intelligence Academy publishes the *Romanian Intelligence Studies Review* (RISR), a high-quality peer reviewed and indexed research journal, edited in English and Romanian twice a year.

The aim of the journal is to create a framework for debate and to provide a platform accessible to researchers, academicians, professional, practitioners and PhD students to share knowledge in the form of high quality empirical and theoretical original research papers, case studies, conceptual framework, analytical and simulation models, literature reviews and book review within security and intelligence studies and convergent scientific areas.

Topics of interest include but are not limited to:

- Intelligence in the 21st century
- Intelligence Analysis
- Cyber Intelligence
- Open Source Intelligence (OSINT)
- History and memory in Intelligence
- Security paradigms in the 21st century
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Review Process: RISR shall not accept or publish manuscripts without prior peer review. Material which has been previously copyrighted, published, or accepted for publication will not be considered for publication in the journal. There shall be a review process of manuscripts by one or more independent referees who are conversant in the pertinent subject area. Articles will be selected based on their relevance to the journal's theme, originality and scientific correctness, as well as observance of the publication's norms. The

editor evaluates the recommendation and notifies the author of the manuscript status.

The review process takes maximum three weeks, the acceptance or rejects notification being transmitted via email within five weeks from the date of manuscript submission.

Date of Publishing: RISR is inviting papers for No. 33 and 34 and which is scheduled to be published on June and December, 2025.

Submission deadlines: February 1st and July 1st

Author Guidelines: Author(s) should follow the latest edition of APA style in referencing. Please visit www.apastyle.org to learn more about APA style, and <http://www.animv.ro> for author guidelines. For more details please access the official website: **animv.ro**

Contact: Authors interested in publishing their paper in RISR are kindly invited to submit their **proposals electronically in .doc/.docx format at our e-mail address rrsi@sri.ro, with the subject title: article proposal.**

*A*ppearing twice a year, the review aims to place debates in intelligence in an institutional framework and thus facilitating a common understanding and approach of the intelligence field at national level.

*T*he target audience ranges from students to professionals, from the general public to those directly involved in intelligence research and practice.

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