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THE MANAGEMENT AND STRATEGY OF ROMANIA'S ACCESSION TO THE SCHENGEN AREA THROUGH THE SECURITY OF STATE BORDERS AND THEIR EQUIPMENT WITH SCANNING DEVICES

Neta SAPTEBANI, Madalina FAGET, Marian MOCAN

Abstract: *The objective, correct and thorough analysis of the current level of technical equipment of the degree of assimilation of the requirements of the Schengen Catalog as well as the realistic estimation of the needs and logistical requirements, for each of the customs points concerned. Accelerating the steps and activities specific to the fulfillment of the commitments assumed by the Government of Romania provided as priority directions by the National Strategies (for 2007/2008), in the conditions that the Romanian state did not request exemptions from the deadlines or stages fixed in the calendar of the Schengen Action Plan adopted by the EU. Starting from the current situation that changes the entire geo-political strategy at the global level, and at the European level, Poland being neighboring and having external borders with Ukraine and Russia, these being two countries with an economic potential that have both imports and exports both in the EU but and non-EU. The European space felt vulnerable to both excise goods and counterfeit goods, equipping customs offices with the external border in Poland with X-ray scanning devices to detect goods from trucks as well as trains and aircraftin a maximum of 12 lines. We will delve into the requirements Romania needs to fulfillto ascend to the Schengen area, starting with an analysis of the existent equipment.*

Key words:*scanning devices, Schengen, borders security*

1. INTRODUCTION

The Schengen Region is a range comprising 27 European nations that have authoritatively canceled all visas and all other sorts of border control at their common borders. Being a component inside the more extensive region of opportunity, security and equity approach of the European Union (EU), it for the most part capacities as a single ward beneath a common visa approach for worldwide travel purposes.

The border control system was created from the 1985 Schengen agreement that was discussed between five EU states –Belgium, France, Germany, Luxembourg, and the Netherlands. Until 1999 it was operating as a different control system, that was outside the legislation/laws of EU. With the signing of the second accord (the Schengen Implementing Agreement) in 1990, the participating nations agreed to do away with internal border controls on individuals and create a unified system of external border controls on people's admission into the Schengen area.

These scanning means have brought an economic and financial benefit to the EU regarding the projection and collection of the sums from excise taxes and property rights.

It is known that there is a large amount of traffic with everything on the east-east border with Romania and Poland that comes from Ukraine. At the European level, an analysis of the losses incurred and incurred through this illicit tobacco traffic was ordered, and research and financial analyzes were carried out which demonstrated that an investment in such scanning devices is necessary, and their amortization is recovered in a relatively short period of time short by discouraging illicit traffic and the sale on the free market of those who

meet and respect the fiscal conditions. It was thought that it was impossible to stop the traffic, but for a short period of time, progress was made, bringing benefits to the European economy both from the collection of fines and from the sale of recognized and approved excise products from a fiscal point of view.

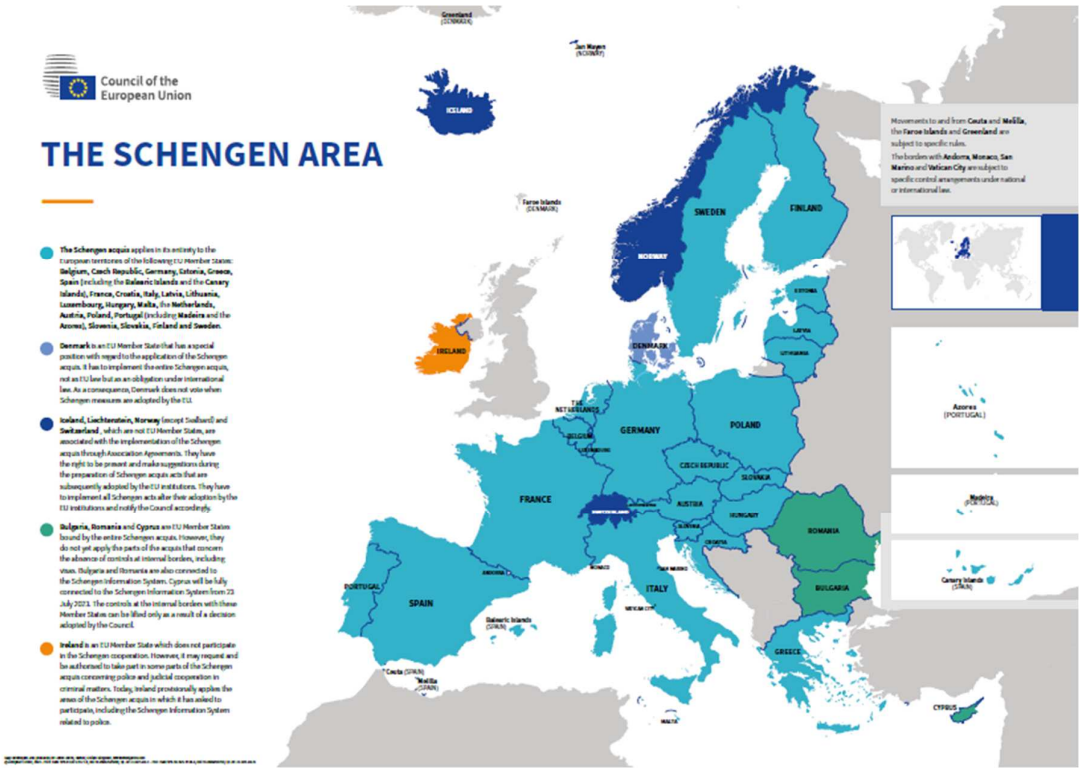

Fig. 1 Schengen area poster (https://www.consilium.europa.eu/en/documents-publications/publications/the-schengen-area-poster/).

2. DESCRIPTION OF THE EXISTING SITUATIONS

The same situation is faced by Romania, being a member country of the EU and having borders with third countries such as Serbia and Ukraine. In the current context regarding the events unfolding on the eastern border and the border customs activity both on land and sea Romania must bear many consequences due to the war, the number of imports from Ukraine to Romania is currently blocked, but the exports from the EU to Ukraine takes place both by land and by sea on the Black Sea.

A second state border is Serbia, which stretches over an area of 546.4 kilometers stretching from BebaVeche (Romania) to Pristol (Romania), having both land and river borders.

The largest customs offices on the western border of the country with Serbia are the Moravita and Jimbolia Naidas (Romania) customs offices, these being included in the modernization program of the PNRR regarding their equipping with the latest generation X-ray scanners.

Romania implements community policies in the field of integrated management of the state border, to achieve an adequate level of security of its borders. In this sense, by Government Decision no. 324/2007, published in the Official Gazette no. 249 of 13.04.2007, the National Strategy for Integrated Management of the State Border of Romania in the period 2007-2010 was approved, which represents a continuation of the programmatic document developed for the period of pre-accession to the EU (2004 – 2006) adopted by GD no. 471/2004.

The goal of the National Strategy for Integrated Management of the State Border of Romania within the Period 2007–2010, also known as the National Strategy, is to achieve a shared, consistent, and effective management of

the State Border of Romania in accordance with community requirements. This will ensure that citizens' security is increased while maintaining their fundamental rights and freedoms, that legal traffic in goods and people at the border is facilitated, and that the requirements for applying the Schengen acquis provisions and gaining access to this area are fulfilled as soon as possible.

Considering the anticipated increase in migratory pressures at the external border following Romania's accession to the EU, the document's content aims to improve Romania's ability to achieve a high level of control at the country's external border while also combating Romania's status as a country of origin, transit, and destination for victims of human trafficking and the fight against illegal migration.

These will be realized through the implementation of a complex of measures aimed at the adoption and implementation of the relevant community acquis, institutional construction and investments for civil construction works, acquisitions of technical means, equipment, and specialized systems. The investments are intended for the modernization and development of border infrastructure, as well as the development and efficiency of border surveillance and control functions, in an integrated concept.

The national strategy outlines two approaches for the integrated management of borders: - the approach of planning specific actions on the four filters/levels in line with the Schengen Catalog's best practices and recommendations for external border control, extradition, and readmission:

- Control and supervision of the state border of Romania;
- Viewpoints on the Integrated Border Security System (SISF) as the primary tool for appliance the incorporated management of the state border of Romania.

To achieve the objectives of the National Strategy, the Romanian authorities will adopt a unified and coherent policy in integrated border management, in line with EU policy, which consists of the interconnected parts listed below:

- Joint effort of all institutions;
- Based on the provisions of the action plan, the authorities, and institutions with attributions at the border develop their own sectoral programs.

One of the most important objectives is to enhance the proportions of the Romanian to achieve a high level of control and security at the borders of the EU, concurrently in the context of the anticipated rise in migratory pressures at the external border with the admission to the EU, with the battle against the Romanian state as the nation of origin, transit, and destination of victims of human trafficking, as well as with the battle against illegal migration. This will be accomplished by putting into practice a few steps that are designed to adopt and execute the pertinent community acquis, build institutions and make investments in civil construction projects, and purchase specialized systems, equipment, and technological means.

The investments are meant to improve border surveillance and control operations' efficiency, development, and modernity.

To achieve the objectives of the National Strategy, a unified and coherent policy will be adopted in the field of integrated border management, in the spirit of the EU’s policy, stated in the Commission's Communiqué of May 7, 2002 "Towards an integrated management of the external borders of the member states of the EU", which includes trained personnel and interoperable equipment. Furthermore, the following aspects have to be considered:

- The extent of the phenomenon of traffic with heavily taxed products, excisable products;
- Increasing cases of the involvement of smuggling networks in the trafficking of counterfeit products;
- The involvement of organized crime networks in the illegal trafficking of currency and other bearer payment instruments, such as bank cards, traveler’s checks, money orders and the like;
- The skillful speculation of the legislation and the attraction of people with decision-making functions from institutions with attributions in the fight against customs fraud and

corruption to ensure the protection of the illegal operations carried out.

In addition to the above particularities, the geostrategic Romania has a position than can be emphasized, whose borders constitute a part of the external borders of the EU, which determines the necessity of taking of special measures to be able to have a higher level of border control. Around 2040 km – are for the border with Moldova, 681.3 km, the Black Sea, 193.5 km and the border with Serbia, 546.4 km - are the external borders of the EU. Nevertheless, ensuring an adequate management of the border and the introduction of high-performance technologies used in border security are aspects of interest that are valid not only for Romania, but as well for the EU.

The concept of integrated management is presented as follows for safety the state border:

This is a strategy that is at national level and is based on the analysis of the main patterns and trends in the evolution of criminality at the cross-border level, also as on this concept for incorporated border management, the basis for the development was on the provisions of the Schengen Index, "Control of external borders, extradition and readmission: Best practices and recommendations", which was adapted for the conditions presented in Romania.

The primary tool used for exercising incorporated border management is the Integrated System for State Border Security.

Ensuring the appropriate equipment for the type of border and the operative situation, necessary for carrying out surveillance and control actions, according to Schengen requirements.The realization or modernization, as appropriate, of the communication and IT systems compatible and interoperable with the existing systems at the European level.The incorporated system for state border protection concept.

The SISF is a primordial tool used for application of the integrated management of the state border of Romania.According to the usage background, SISF belongs to a class of very complex systems – defined as being a framework of systems. Based on this complexity, it is defined and is built-up with several complex autonomous subsystems, which are closely related, different from the perspectives of technology, contextual, operational, geographical, and conceptual framework point of view. For Romania, achieving this goal is essential to safeguarding both its own borders and those of the EU.

Transposition into practice following a comparative study between the imperatives of the EU and the internal legal requirements of the recommendations and good practices established at the border level, agreed by the EU to substantiate uniform and unitary principles, norms, rules, and endowments for the entire Schengen area, foreshadowed:

a. The responsibility for the security of the internal borders' rests entirely with the state as a component member of the EU.
b. The possibility of accessing the funds allocated by the E.U. to introduce equipment and high-performance technology, considering that the eastern, northeastern, and southwestern border of the Romanian state is identified with the border of the European Community on the same segment.

Ensuring an essential, flexible, and coherent border surveillance infrastructure at the national level, which allows adaptation but also connection (legislative, logistical and operational) to the relevant European Community bodies, especially to the specialized one, namely the FRONTEX Agency;

3. METHODS AND METHODOLOGY

The accession of Romania to the Schengen Area, like any complex geopolitical process, requires a multifaceted approach blending political, legal, and socio-economic considerations. Here's a scientific approach outlining key steps: political diplomacy(establishing strong diplomatic ties with existing Schengen member states, as well as bilateral negotiations and fostering relationships to gain support), continuous improvement (adding new technologies, implementation of the Schengen regulation.

By approaching Romania's accession to the Schengen Area systematically and scientifically, policymakers can enhance the country's chances of successful integration while addressing concerns and maximizing the benefits of

membership. The bottleneck for Romania's accession to the Schengen Area primarily revolves around concerns related to border security, rule of law, and corruption.

One of the biggest bottlenecks that Romania is facing is related to border security.Romania needs to demonstrate effective control over its external borders, including implementing adequate infrastructure, technology, and personnel to ensure the proper monitoring and management of border crossings. Concerns may arise regarding the capacity to effectively handle the flow of people and goods, particularly in regions with high migration or smuggling activities.

Romania needs to demonstrate the technical and administrative capacity to fully implement the Schengen acquis, including aligning its legislation with Schengen standards, enhancing border management systems, and participating in Schengen information-sharing mechanisms.

Overcoming these bottlenecks requires sustained efforts by the Romanian government to address deficiencies in border security, rule of law, and governance, as well as active engagement with other Schengen member states to build trust and address concerns. Additionally, continued support from the EU in terms of technical assistance and monitoring mechanisms can facilitate Romania's progress towards Schengen accession.

Regulation (EC) no. 562/2006 of the SEC must also be taken into consideration while implementing the systems and equipment required for the harmonization and unification of the national customs system. 153/2008 states that the use of automatic gates by EU citizens would be the first step toward preparing the next stages of border management in the EU. Subsequently, an automated system to track the time and location of foreign nationals' entry and departure would be developed, and finally, the creation of an electronic travel authorization system (SEAC) would be the final step.

The investigation of a different proposal, specifically SEC 151/152, which relates to the EUROSUR system's implementation phases, is another issue that this research is focused on. These phases are foreseen to be three in numbers:

- The improvement and expansion of border surveillance systems and the interconnection of national infrastructures in a communication network;
- The path taken by research and development to able to enhance sensors and surveillance tools (satellites, VAPs, etc.) and the development of a common application of surveillance instruments;
- All reliable data received from national surveillance tools, new surveillance systems, European and international used reporting systems, also IT sources must be gathered, analyzed, and separated/distributed in an organized manner to be able to establish a common environment for information correspondence between the pertinent authorities.

Enhancing the strategies, tactics, and effectiveness of border protection on the outside by:

- Implementation of the latest generation facilities in a uniform and unitary manner, as available in Schengen index;
- Replacing the current signaling system, selection, preselection, or other traffic management functions, with those available at Schengen catalog, multifunctional and interchangeable, electronic type;
- Ensuring a permanent and total control over the perimeters of the interior spaces of the customs, at any possible time(during day/night), including those customs points with a temporary schedule, by taking over the signals at the permanent dispatches, either at the Border Police or at the Customs;
- Ensuring a permanent and fast link between customs points, between bodies with different horizontal or vertical competences of the same authority;
- Ensuring the interconnections of bodies with specializations but with different attributions in the security and national defense system (Customs, Border Police, IGP,SRI, ANA, etc.);

- Ensuring the data storage capacity and the achievability of delivering the stored information to authorized users, in a real and operative way;
- Regulation, calibration, and standardization of the existing equipment;
- Implementation of machinery and technical means, uniformly for the detection, signaling, scanning or visualization of freight transport (radiation, thermal cameras, X-ray devices, etc.) and as a last clarification that is required is the consideration of the Schengen access control model on four levels:
- Measures within the consulates; cooperation with neighboring countries; border control and control measures within the Schengen area, including return.

3.1 Scanning devices in Europe

European Commission, claims, in the proposal presented, that the plan included an interim evaluation of the legal provision implementation and the UCC's IT system delivery regarding effectiveness, efficiency, relevance, coherence with associated policies, and EU added value in 2022. This evaluation was made considering the establishment of the Union Customs Code and EU Customs Authority, the repeal of Regulation (EU) No 952/2013. 17 IT systems were established by the Code. Eight systems were successfully deployed by 2020 and are working satisfactorily according to stakeholders, four more were deployed in 2021 while five systems are to be deployed gradually by the end of 2025. Frontex utilizes a range of scanning devices and technologies to enhance border security and control. These scanning devices are used for various purposes, including security checks, identification verification, and customs control.

Several locations around Europe, such as the following countries, are using various types of scanning devices.The specific scanning devices and technologies used by Frontex and EU member states may vary depending on their operational requirements and available resources. These technologies are employed to enhance border security, facilitate legitimate travel and trade, and ensure compliance with customs and immigration regulations while protecting the EU's external borders.

1. Germany:
   - Types: X-ray scanners, biometric identification systems, license plate recognition systems.
2. France:
   - Types: X-ray scanners, license plate recognition systems, thermal imaging cameras.
3. Spain:
   - Types: X-ray scanners, biometric identification systems, radiation detectors.
4. Italy:
   - Types: X-ray scanners, biometric identification systems, customs declaration scanners.
5. Netherlands:
   - Types: X-ray scanners, biometric identification systems, license plate recognition systems.
6. Greece:
   - Types: X-ray scanners, biometric identification systems, license plate recognition systems.
7. Poland:
   - Types: X-ray scanners, license plate recognition systems, customs declaration scanners.
8. Sweden:
   - Types: X-ray scanners, biometric identification systems, license plate recognition systems.
9. Austria:
   - Types: X-ray scanners, license plate recognition systems, radiation detectors.
10. Hungary:
    - Types: X-ray scanners, thermal imaging cameras, radiation detectors.
11. Czech Republic:
    - Types: X-ray scanners, biometric identification systems, radiation detectors.
12. Portugal:

- Types: X-ray scanners, biometric identification systems, customs declaration scanners.

13. Slovakia:
    - Types: X-ray scanners, license plate recognition systems, customs declaration scanners.
14. Bulgaria:
    - Types: X-ray scanners, biometric identification systems, radiation detectors.
15. Romania:
    - Types: X-ray scanners, biometric identification systems, customs declaration scanners.

X-ray scanners are widely used at borders in Europe for security purposes, particularly for inspecting cargo, vehicles, and luggage. These scanners employ various technologies to provide detailed images of the contents of objects passing through them.

At border crossings, X-ray scanners are often used to inspect cargo shipments entering or leaving the country. Trucks or containers are directed through designated scanning areas where X-ray scanners generate detailed images of the contents. These images are analyzed by trained personnel to detect any anomalies or suspicious items within the cargo.

X-ray scanners are also used for vehicle screening and luggage and baggage screening.Overall, X-ray scanners play a crucial role in enhancing border security in Europe by providing non-intrusive inspection capabilities to detect illicit goods, weapons, and other security threats. These scanners contribute to the overall safety and security of border crossings while facilitating the smooth flow of legitimate trade and travel.

A special mention here will also be one of the main devices used for scanning borders in Europe is the Vehicle and Cargo Inspection System (VACIS). VACIS is a type of large-scale X-ray scanning system designed specifically for inspecting cargo containers, trucks, and other large vehicles at border crossings, ports, and customs checkpoints. These systems utilize powerful X-ray sources and detectors to generate detailed images of the contents of vehicles and cargo containers, allowing border security personnel to detect contraband, illegal goods, or other security threats.

3.2 Location information Customs Office

It is located on the border with Serbia in the town of StamoraMoravita, Moravita commune, in the plain area as an access way: E 70 Calafat-Belgrade.

The main risks monitored are drug trafficking, weapons, human trafficking, illicit traffic in goods, adherence to the regulations governing regarding the distribution of excisable products, and all the monitoring it's done by the by the mixed team made up of customs workers and border police workers. The Moravita Customs Office (Romania) owns new buildings from 2011, provided with 7 access lanes in each direction (entrances/exits)

The track for using the ROBOSCAN X-ray scanning equipment provided with a radioactivity protection fence.

Functional spaces or dominant buildings (note the significant buildings for BV activity):

1. Extended building that houses the headquarters of the Customs Office and the Border Police;
2. CNAIR has buildings;
3. Buildings of customs commissioners;
4. Buildings of SNSAV;
5. Buildings of FITOSANITAR.

In table 1 we can see the actual infrastructure of the custom point. We are now able to perform checking for entries in 8 points, six of them are available for cars, one of them is for trucks, and one for persons. We have the same equivalent when we are speaking about exit.

Table 1

Traffic accesslanes.

Traffic/access lanes	***ENTRY***	***EXIT***
Trucks	1	1
Cars	6	6
Persons	1	1

Table 2

Number of entry/exits per years.

Year	**Entry**	**Exit**

	Trucking	Cars	People	Trucking	Cars	People
2019	55000	503	1052	45983	498	509
2020	58400	378	995	53628	392	1005
2021	59600	279	1922	56202	195	212
2022	Ongoing					

Table 3

Types of illegal activities.

Illegal activities	Records of illegal activies
Smuggling;	Discoveries of excisable products (tobacco, cigarettes, alcohol)
Illegal traffic of goods;	
Traffic in stolen cars;	
Illegal crossings of the state border	Discoveries of people
Human trafficking	

Monitoring illicit activities (visible in table 3) at borders is a critical aspect of maintaining national security and public safety. By employing a combination of surveillance, patrols, inspections, technology, and intelligence sharing, border security agencies work to detect, deter, and prevent various forms of criminality at international borders,toreduces illicit activities at borders, border security agencies implement a variety of strategies and actions aimed at enhancing detection, deterrence, and prevention. Some key actions include:

- Strengthening border controls through increased patrols and inspections;
- Improving intelligence gathering and analysis to identify emerging threats;
- Enhancing interagency cooperation for coordinated efforts;
- Investing in technology and infrastructure for better detection capabilities;
- Providing training and capacity building for border security personnel;
- Promoting public awareness and community engagement;
- Addressing root causes such as poverty and political instability.

Nevertheless, some additional arrangements are required:

- Extension of the building with storage spaces and cold rooms for the storage of perishable, retained or confiscated products.
- Arrangements of entry and exit arteries of the spaces regarding body control.
- Arrange the covered control ramp in the exit direction.

There is a list of equipments existents or needed, referring to the list below we will have table 5, showing us the quantity of existing equipment or needed one:

1 Portable x-ray equipment for false doors/walls;
2 X-ray machines for baggage control;
3 Heavy vehicle examination system with gamma radiation;
4 It carries ionizing radiation detection for trucks;
5 Wear ionizing radiation detection for people;
6 Vehicle lower surface inspection system;
7 Integrated border management system with video surveillance;
8 Detection and identification of drugs;
9 Equipment for examining documents;
10 Endoscope/ Video endoscope;
11 Searcher (detector of density variations);
12 Night vision device;
13 Digital video cameras;
14 Smart seal system;
15 GPS tracking and monitoring system of customs transits;
16 System for monitoring staff exposure to ionizing radiation.

As a total count of employees in Moravita (Romania) customs office we have 38 employees in total: 2 management positions, chief and deputy chief,34 enforcement functions, customs inspector,2 contractual staff positions. The existing staff is sufficient for the optimal use of the equipment provided.

The activity of the customs office is structured on 4 duty shifts that are carried out non-stop, in each shift there are twoCNCAN authorized customs inspectors, who specialize in non-destructive control, make un the entire number of of authorized personnel in the customs office is 8 workers.

They benefited from a schooling strategy for the CNCAN authorization.

There are risks of radiation at the time of existing technology, these seriously affect health if safety at work is not respected.

The Moravița customs office currently no longer holds CNCAN authorizations for the purpose of closed source equipment or x-ray generators.

Table 4

Connections status

Internet connection	Yes
System administrator	Yes
Regional/national ANV Network	Yes
Mobile phone network	Weak signal
Monitoring of the ROBOSCAN scanning system is done by MB-TELEKOM Romania	
There are UPS equipment / generators to supplement the electricity supply	

Table 5

Existent equipment

No.	Necessary	Existent	Technology	Functional
1	**1**	**0**	**ROBOSCSN**	**0**
2	**1**	**1**	**RAPISCAN**	**1**
3	**1**	**0**	**SAPHYMO**	**0**
4	**2**	**2**	**NSBD**	**2**
5	**2**	**2**	**NSBD**	**2**
6	**1**	**0**	**VLETG**	**0**
7	**40**	**40**	**AXIS**	**40**
8	**1**	**1**	**ITEMISER**	**1**
9	**1**	**1**	**VLETG**	**1**
10	**1**	**1**	**VLETG**	**1**
11	**1**	**0**	**RAD REFLEX**	**0**
12	**40**	**10**	**AVN**	**10**
13	**34**	**34**	**AXIS**	**34**
14	**10**	**0**	**UTI**	**0**
15	**10**	**0**	**UTI**	**0**
16	**1**	**0**	**SAPHYMO**	**0**

4. RESULTS

Controls will be performed on means of transport, objects and goods in possession people crossing the border, an exclusive attribute of the customs authority, a fact emphasized also by the continuation of the respective provision "The current law from the member state involved will apply to any control types".

Route of a vehicle < 3.5 tones:

If contraband is suspected, the vehicle will be diverted to the screening area where an inspection will take place using a mobile non-intrusive gamma radiation inspection system that x-rays the entire vehicle or unloaded and the baggage inspected using an X-ray cargo inspection system and luggage. The produced images will reach the Local Information System automatically through the interconnection of the systems or semi-automatically entered by the Customs Office worker.

If there are suspicions of drug trafficking or explosive materials that pose a risk to internal security, the customs officer can check to determine whether the car has such materials or on the driver using the detection and identification systems for drugs and explosives. The information resulting from the checks will be entered by the Customs Office worker in the Local Information System.

If there are suspicions of radioactive material traffic, the vehicle will be controlled with the portable isotope detection and identification system. After the checks, the customs worker will act in accordance with the procedures established by CNCAN and the information taken by the radioactive material detection system will be transferred to the Local Information System automatically through direct connection or semi-automatically through data export mediated by the Customs Office worker.

All information are collected into the Local Information System will be saved using an identification key corresponding on the vehicle's registration number.

If the border police agent decides that the checked person and the checked vehicle are not suspicious and/or there are no records in the SIS regarding them, he transfers the person's vehicle, objects and luggage for checking to the customs office worker. If the customs office worker has decided that there are no prohibited materials and/or objects, give the command in the

software application or by remote control to open the barrier and allow the vehicle to leave the control area.

The functions of the system are:

- Automatic management of traffic management systems;
- Automatic management of vehicle and person surveillance systems;
- Integrating the information taken from the security systems and organizing them under a single key;
- Interface with the Customs Office worker and the Border Police agent;
- Exchange of data with the IT systems of the Border Police;
- Communication with a Central Information System that will operate at the Romanian Customs Authority;
- Communication interfaces for operators with competences in national and European security;
- The request and retrieval from the AVR central server, the IT systems of the customs offices, the IT system of the Border Police of information about the persons and vehicles at the control points, when the Central IT System is implemented and there are available connections.

System characteristics:

- Dynamic traffic management, by controlling/synchronizing barriers and traffic lights, to increase the fluidity of road traffic.
- Indexing and saving records with video and photo images of all vehicles and people passing through the border crossing control point. Images are indexed by information such as: customs office, workstation, video camera, date/time, operator, registration number, etc.
- The records, including the video and photo images, will be kept in the database for at least one year and are saved using the key generated based on the registration number provided by the automatic registration number retrieval and identification system.
- Displays in real time the status of the subsystems connected to the system, such as the video surveillance system of vehicles, people and the perimeter, the traffic management system, the automatic registration number retrieval and identification system and the control systems of the customs office equipment that can be managed by the computer system in automatic or semi-automatic mode.
- Records in the "black box" application log all operator actions and all operational problems of any components within the connected subsystems such as: servers, workstations, video cameras, peripherals (barriers, traffic lights, inductive loops, etc.)
- open system for operators with competences in national and European security with public communication protocols for data transfer
- the system can generate reports, both predefined and freely definable
- Each customs worker, serving one or more road lanes, will be able to control/view from a workstation (PC), the barriers, traffic lights and video cameras (front, back, overhead) associated with the served road lanes.
- Depending on the access level established by the system administrator, the operator can access any of the equipment from the subsystems that make up SIL.
- All video cameras to which access is easy must be provided with reinforcement systems or anti-vandal housings, so that they cannot be vandalized or sabotaged.
- for areas where natural and/or artificial light is not sufficient to have a clear image under any conditions, dual day/night video cameras will be used together with infrared lighting.
- The "live" images provided by any of sill’s video cameras must be able to be accessed and controlled (pan-tilt-zoom), through secure connection, based on user and password, from a web application

without requiring pre-installed software applications.

- easy maintenance, as the system will Have an integrated alarm module that automatically provides information about the state of the system, of the equipment connected to the sill, automatically emits alarms when malfunctions are signaled in the system that it can direct on various communication channels (email, SMS, light and acoustic warnings)

5. CONCLUSIONS

In conclusion a first step will be improving the means, methods, and performance of external border security.

The system deploys a lot of benefits for the employees of the Customs Office, such as easy maintenance, automatic management of vehicle and person surveillance systems, the system can generate reports, both predefined and freely definable, dynamic traffic management, by controlling/synchronizing barriers and traffic lights, to increase the fluidity of road traffic. To become a member of the Schengen Area, a candidate country like Romania must meet certain criteria related to border control, visa policies, law enforcement cooperation, and data protection. It also needs the approval of all current Schengen members before being granted entry into the area.

Romania has made progress in fulfilling these criteria, and achieving better equipment at borders will support improving our position. The displays in real time the status of the subsystems connected to the system, such as the video surveillance system of vehicles, people and the perimeter, the traffic management system, the automatic registration number retrieval and identification system and the control systems of the customs office equipment that can be managed by the computer system in automatic or semi-automatic mode, it is going to bring further improvements and will also facilitate and fasten the checking that needs to be performed at the custom point.

The investments are meant to improve border surveillance and control operations' efficiency, development, and modernity. All reliable data received from national surveillance tools, new surveillance systems, European and international used reporting systems, also IT sources must be gathered, analyzed, and separated/distributed in an organized manner to be able to establish a common environment for information correspondence between the pertinent authorities.

It's essential to note that the process of joining the Schengen Area can be complex and may take time. Despite Romania meeting many of the technical requirements, political considerations and other factors have delayed its accession in the past.

Therefore, ongoing efforts from both Romania and the EU are necessary to facilitate Romania's eventual membership in the Schengen Area. The opinions of Schengen states regarding Romania's accession to the Schengen Area have varied over time and are influenced by several factors.

Some Schengen member states have expressed support for Romania's accession, citing benefits such as increased security cooperation, economic integration, and strengthening of the EU external borders.

However, other member states have raised concerns about Romania's readiness to join the Schengen Area, particularly regarding issues such as border security, rule of law, corruption, and migration management. These concerns have led to debates and discussions within the EU about the conditions and criteria for Romania's accession.

Overall, opinions within the Schengen states are likely to be diverse, reflecting differing perspectives on the benefits and challenges of Romania's integration into the Schengen Area. Ultimately, decisions regarding Romania's accession will depend on negotiations among member states, adherence to Schengen criteria, and broader political considerations within the EU.

In conclusion, Romania's aspiration to join the Schengen Area remains an ongoing endeavor that hinges on various factors including meeting technical criteria, securing political support from existing Schengen member states, undertaking internal reforms, and navigating the

complexities of EU politics. While Romania has made significant progress in aligning with Schengen standards, delays persist due to political considerations and concerns over issues such as corruption and border security.

Nevertheless, Romania's continued efforts, coupled with diplomatic initiatives and potential reforms, suggest that eventual accession to the Schengen Area is feasible. However, the timing and circumstances surrounding Romania's integration into Schengen remain subject to ongoing negotiations and diplomatic efforts.

Enhancing security at borders requires a holistic approach that integrates technology, infrastructure, personnel training, international cooperation, and policy frameworks. By adopting proactive strategies and leveraging collaborative efforts, countries can effectively safeguard their borders while facilitating legitimate cross-border activities, Romania will rise is chances of being part of the Schengen area.

6. REFERENCES

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Managementul șistrategiei aderării României la zona Schengen prin securitatea frontierei de stat și echiparea acestora cu dispozitive de scanare

Obiectivul, o analiza obiectivă, corectă și detaliată a nivelului actual de dotare tehnică și a gradului de asimilare a cerințelor Catalogului Schengen precum și estimarea realistă a nevoilor și cerințelor logistice, pentru fiecare dintre punctele vamale în cauză. Accelerarea demersurilor si activitatilor specifice indeplinirii angajamentelor asumate de Guvernul Romaniei prevazute ca directii prioritare de Strategiile Nationale (pentru 2007/2008), in conditiile in care statul roman sa nu solicite scutiri de la termenele sau etapele fixate. în calendarul Planului de acțiune Schengen adoptat de Uniunea Europeană. Plecând de la situația actuală care schimbă întreaga strategie geo-politică la nivel global, și la nivel european, Polonia fiind vecină și având granițe externe cu Ucraina și Rusia, acestea fiind două țări cu potențial economic care au atât importuri, cât și exporturi. atât în Uniunea Europeană, dar și în afara UE. Spațiul european s-a simțit vulnerabil atât la produsele accizabile, cât și la mărfurile contrafăcute, dotând birourile vamale de la frontiera externă din Polonia cu dispozitive de scanare cu raze X pentru a detecta mărfurile din camioane, precum și din trenuri și avioane.în maximum 12 linii. Vom aprofunda cerințele pe care trebuie să le îndeplinească România pentru a adera în spațiul Schengen, începând cu o analiză a echipamentelor existente.

Neta SAPTEBANI, PhD Student,PhD student, Politehnica University of Timisoara, Faculty of Management in Production and Transportation, +40256404284, 14 Remus str., 300191 Timisoara, Romania, neta-ionelia.saptebani@student.upt.ro.

Madalina FAGET, PhD Student,PhD student, Politehnica University of Timisoara, Faculty of Management in Production and Transportation, +40256404284, 14 Remus str., 300191 Timisoara, Romania,madalina.faget@student.upt.ro

Marian MOCAN, Prof. Dr. Eng. Ec., Politehnica University of Timisoara, Faculty of Management in Production and Transportation, +40256404284, 14 Remus str., 300191 Timisoara, Romania,marian.mocan@upt.ro