From pen to IT system
-digitization of the civil registration activity in Romania-

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Abstract

Civil registration systems are essential for managing vital records such as births, deaths, marriages, and divorces, and serve as the foundation for a country's legal, administrative, and social frameworks. With the rapid advancement of digital technologies, the modernization of these systems has become a priority for many governments in Europe, aiming to improve efficiency, enhance service delivery, and support broader digital governance initiatives. The strategic transition from paper-based "pen to IT" systems is no longer an administrative luxury; it is a fundamental requirement for achieving Digital Public Infrastructure (DPI) objectives. Modernization facilitates real-time data exchange and enhances the probative value of records.

This paper explores the modernization of civil registration systems in Europe, with a particular focus on Romania, highlighting the challenges and opportunities associated with digital transformation. It examines the evolution of civil registration in Romania and some countries in Europe, identifying key trends, policies, and innovations in the field. Through a comparative analysis, the paper assesses the progress of Romania's civil registration system in relation to other European countries which have pioneered digital solutions. The paper concludes with recommendations for Romania to overcome its modernization challenges, emphasizing the need for a balanced approach that incorporates technological, legal, and social considerations. By addressing these challenges, Romania can strengthen its civil registration system, align with EU standards, and improve the overall efficiency and accessibility of public services.

Keywords: Civil Registration, digitization, Romania, Governance, Public Administration

Chapter 1. Introduction

"Everyone has the right to be recognised as a person before the law"

The Universal Declaration of Human Rights, article 6

The modern state is a complex entity that, as a subject of international law, comprises the following key elements: a permanently settled population, a demarked territory, a government in place, and the capacity to develop diplomatic relations with other countries. (Montevideo Convention on the Rights and Duties of States, article 1,1933). The population represents the demographic, psychological, and spiritual dimensions of the state. It is the community of individuals residing within a strictly defined territory of the state and over whom state power is exercised. A territory without a population cannot be considered a state.

Within this framework, for its legal existence, the state must first and foremost have a registered population, a requirement that can be met only through the civil registration system and the civil status records that serve as its tools**.** Civil status documents form the basis of a person's legal identity and their relationship with the state, as they convert biological events into legal facts that the state can recognise and manage. (Art. 99 New Civil Code, 2024). Civil registration is not merely a bureaucratic formality; it is the "invisible state" that defines our very existence, the vital foundation of modern society. From a legal perspective, without registration, there is no population—only a group of human beings without recognised rights. (Law no. 119/1996, n.d.)

The U.N. defines civil registration as the continuous, permanent, and compulsory universal recording of the occurrence and characteristics of vital events pertaining to the population, as provided by decree or regulation, in accordance with the legal requirements of each country, with full respect for the rules governing the protection and confidentiality of personal data. (United Nations, 2014)

The term "civil registration system" refers to the entire administrative, legal and institutional framework, including the personnel, registration network, various procedures, processes of record-keeping and retrieval, issuing of certificates, preparation of outputs, transfer of data, provision of services to other agencies and all other activities pertaining to civil registration in a country (or state, or province). Civil registration involves recording civil status events (births, deaths, marriages, divorces, adoptions, etc.) as civil status acts and issuing the corresponding certificates.

In compliance with the Romanian law, civil status is the key link between the population and the state's institutional system, thereby transforming a biological existence into a legal person endowed with constitutional rights (Heywood, 2019; Law No. 119/1996). According to the aforementioned law, civil status documents are "official documents drawn up in the interest of the state and the person", the essential source of information for the size, structure, and demographic trends of the population. Civil registries are a control mechanism of the state and also a means of safeguarding citizens' rights , making them the most important administrative element of the modern political system. The development of digital technologies has pushed the modernization of these systems to the top of the agenda for many European governments, with the aim of boosting efficiency, improving service quality, and supporting broader digital governance initiatives.

This paper analyses the development of the European civil registration system, particularly in Romania, identifying the challenges and opportunities associated with digital transformation. Through a comparative analysis, it assesses the evolution and development of civil registration systems in Romania and other European countries, identifying key trends, policies, and innovations in this field. ns.

The methodological approach was a literature review of the professional and academic literature on civil registration and population registers. Sources from the OECD, the EESC, the EU, the UN, and the academic community provided useful information and insights; where relevant, the literature was adopted, mentioned and used in the report.

Chapter 2. Historical background

2.1. Greece and Roman Empire

The origins of modern civil registration and legal identity in Europe are deeply rooted in the Greco-Roman traditions and, later, in the Christian church**.** Both Ancient Greece and Ancient Rome used sophisticated methods for tracking their populations, but they served completely different purposes. The Greek system, particularly in Athens, was decentralised and focused on political participation within a direct democracy **(**Hansen, 1991), whereas the Roman system was centralised and formalistic, designed to manage the fiscal and military demands of a vast empire (Gardner, 1986; Grubbs, 2002).

In the **Greek system**, registration was a two-stage process of social integration. First, from a young age, children were introduced to the *phratry*, a *kinship* group where their legitimacy was recorded in religious registers (Lambert, 1993). Second, upon reaching age 18, the process transitioned to the *deme* (the smallest administrative unit of the state), the young man's name being written into the *lexiarchikon grammateion* (the deme's register), registration being the valid proof of citizenship required to vote in the Assembly (Hansen, 1991) .

The Roman system was created to ensure imperial governance and legal order, being focused more on inheritance and property. Furthermore, Augustus and Marcus Aurelius reforms introduced mandatory birth registration, within 30 days of delivery, to the Tabularium or local provincial offices (Schulz, 1942). Unlike the Greeks, who relied on community memory and local registers, Romans carried physical proof of their status in the form of wooden *diptychs* serving the same purpose as modern certificates: they transformed biological events into legal status, allowing the state to manage tax obligations, military service, and inheritance (Gardner, 1986; Grubbs, 2002).

2.2 Christian period

The origins of civil registration in Europe are deeply rooted in the Christian Church, as even though the Greco-Romans recorded the important events in life only very few were discovered. The practice of "registration," as consecutive entries in bound volumes, began as an informal record-keeping tool for priests, intended to document baptisms and funerals. Although the first records appeared in Burgundy in 1334 and in Siena in 1381 (Hollingsworth, 1969), researches proved that the practice remained limited to certain areas until the 16th century (Garenne, 2001), the promulgation of royal decrees, such as Thomas Cromwell's ordinance of 1538 in Great Britain and the 1539 Edict of Villers-Cotterêts in France, transformed parish registers into official state documents that were to be kept by the courts.(UN, 2018/1)By the time the Council of Trent (1563) formalised these procedures for the Catholic world, the

foundations had been laid for a system that would bridge the gap between religious practice and modern civil administration.

The transition from ecclesiastical to civil records marked the final stage in the evolution of civil registration in Europe, a transition catalysed by the well-known French Revolution of 1792. Although the French model set a precedent with regard to the separation of church and state in administrative matters, the rhythm of modernisation varied from country to country across the continent.

2.3. 20th century

At the beginning of the 20th century, European civil registration systems were moving from their religious and bureaucratic origins to modern, state-managed instruments designed for administrative and demographic analysis. The development of these systems throughout the 20th century was characterised by secularisation, technological transformations, and the rise of integrated national databases. While countries like France transferred registration responsibilities from the church to civil authorities as early as the 1792 French Revolution, other regions retained church-led systems well into the 20th century. In Scandinavia, for instance, the clergy continued to act as agents for the civil administration, maintaining continuous population registers until 1930.Crucially, the 20th century saw the codification of international standards by organisations like the World Health Organisation (WHO) and the International Labour Organisation (ILO).

A defining feature of the 20th century was the shift from local, hand-tabulated population lists to centralised national population registers. The introduction of the **national identification number** was a pivotal development, allowing European states to seamlessly link civil registration data with other functional databases for taxation, voting, military service, and social insurance.

The rise of information technology in the second half of the 20th century fundamentally transformed the civil registration system. Before the rise of computers, data from local population registries were compiled manually annually, so their potential for longitudinal analysis remained largely untapped. Computerization has considerably expanded the range and diversity of studies that could be conducted, allowing researchers and authorities to track large populations over time and conduct large-scale epidemiological studies that link vital events with socio-economic and health databases.

Despite their enormous administrative and scientific value, the development of highly interconnected population registries also involves serious risks. The possibility of using the registries for total control of the population was a reality in the totalitarian regimes. This unfortunate legacy has fueled long-standing resistance to national registries and universal identifiers in several countries, leading to the adoption of strict data protection laws and the implementation of decentralised or separately encrypted systems, as is the case today in countries such as Germany and Austria.

Chapter 3. Civil Registration Systems

3.1 Key Definitions and Concepts

Civil registration is defined as the continuous, permanent and compulsory universal recording of the occurrence and characteristics of vital events pertaining to the population, as provided through decree or regulation, in accordance

with the legal requirements in each country, with full respect for the rules regulating the protection and privacy of individual information.(U.N.- Principles and Recommendations for a Vital Statistics System, Rev. 3 (2014), para. 274.)

"Civil registration method" refers to the procedure employed in gathering the basic information on the incidence and characteristics of vital events that occur in the population of a country (or area) within a specified time period, upon which the preparation of vital records with legal value Principles and Recommendations for a Vital Statistics System, Rev. 3 (2014), para. 274.

A **civil registration system** represents the identification, collection and recording of selected vital events, including live births, deaths, fetal deaths, marriages and dissolutions of marriage (divorce), annulments, adoptions, legitimations and recognitions, the results then used to support a variety of functions and activities of the state. (United Nations,2021)

Vital events are the specific life occurrences that fall under the scope of a civil registration system:birth, death, marriage,divorce, annulment, adoption, legitimation, recognition.

3.2. Core functions

The civil registration system has three basic functions of roughly equal importance (U.N.,2023):

1. **the legal and administrative function**, consisting of the registration of vital events and the safekeeping of the records that form the foundation of civil status. The certificate issued by the civil registry system has the same legal force and effect as the original civil registry document and serves as valid legal proof of the vital event. In some countries, the registrar may be designated as a public attester or notary public, with legal authority to create certain legal documents by administering oaths and attesting to signatures.
2. **the statistical function**, which means that registration offices are required by law to collect statistical information on each of the events that must be recorded or reported as entries in the country's vital statistics;
3. **the identity management function**, which requires the civil registry to continuously and accurately provide data to an identity management system or a population registry. According to the U.N. Expert Group on Legal Identity ", birth registration should be the primary means for the granting of legal identity, and civil registration remains the 'gold standard' by which legal identity should be maintained by Member States."(United Nations and World Bank,2018) Accordingly, a person's legal identity is established through birth registration and the birth certificate released which is then used as the primary document for all other identification documents issued thereafter. In many countries, at birth registration, each person receives a unique personal identifier (PIN/CNP) which is used in all subsequent civil registration and identity records of the person concerned, and also in a wide variety of other documentation acquired by individuals during their lifetime (passport, IDs, driver's license, voter card and others).

3.3 The impact of the Civil Registration System on Governance and Society

The ongoing and permanent registration of civil status events is secured by a clear and comprehensive civil registration law, which provides individuals with clear guidance on the organizational structure of the civil registration system, the types of civil status events that must be registered, their definitions, the persons responsible for reporting each type of event, the registration deadlines for each type of civil status event, procedures for late registration, the duties of the civil registrar, rights and obligations related to registration, penalties for non-compliance with the provisions, and so on.

By providing continuous, real-time data on population dynamics—such as births, deaths, and marriages—civil registration allows governments to track the size and characteristics of their population. When integrated into a broader Digital Public Infrastructure (DPI), a well-functioning civil registration system greatly reduces identity fraud, corruption, and the misallocation of public funds. For example, securely linking death registrations to identity management ensures that deceased individuals are properly retired from the system, preventing pensions and public assistance from being paid out in error.

Real-time birthrate data directly influence administrative planning, indicating, for example, exactly where the authorities need to build new schools or maternity wards. In the context of global crises, such as a pandemic, accurate death registration is critical for understanding the true mortality rate and designing effective public health responses. Similarly, cause-of-death data derived from civil registries allow epidemiologists and policymakers to monitor disease trends and measure the impact of health interventions over time.

In case of natural or human-caused disasters, civil registration records enable governments to identify vulnerable populations, estimate emergency housing and vaccine needs, and facilitate the reunification of separated families.

For individuals, birth registration provides official recognition of their existence while affirming their fundamental right to a name and citizenship. Without this, a person becomes “invisible” to the state, creating serious vulnerabilities and preventing them from accessing formal education, healthcare, and social protection programs.

Civil status serves as a gateway to civic participation and social protection. Marital status formalises social relationships and family ties, providing a legal guarantee that certain rights—as survivor’s benefits, spouse support, the division of assets—can be lawfully enforced.

3.4 Types of Civil Registration Systems

The civil registration system is specific to each country as it is determined by its legal, political and administrative structures; there is no “one size fits all” or “best practice” for institutional arrangements. Despite their specificity, due to the wide range of entities involved, a functional Civil Registration System needs a strong coordination mechanism among all stakeholders, which must have sufficient rule-making authority and financial resources to carry out its duties, the system usually fractures.

According to the WHO, an efficient organisational structure for civil registration systems comprises a national network of local registration offices to record civil status events (births, deaths, marriages, and divorces). It integrates legal, administrative, and statistical functions, often managed by the ministries of health, the interior, or justice, to generate data for population registries, national identity management, and SDG monitoring. (World Health Organization, 2021)

There are many opinions among international organisations and academics on classifications of civil registration systems. According to United Nations, *Principles and Recommendations for a Vital Statistics System*, "depending on the judicial, political and administrative structures of a country, as well as its customs and traditions, civil registration, vital statistics and identity systems may be either centralized or decentralized." In practice, there is a third type called "the mix/integrated system" which is actually a mix between those two.

As the world moves at an ever-increasing pace from paper to information technology, we can talk about a new classification criterion based on how documents and certificates are issued. Actually, these two classifications overlap, they are not separated.

According to the criteria established by the U.N., the civil registration systems fall into one of the following categories:

- *centralised systems***:** a national agency is responsible for the civil registration.
- *decentralised systems***:** responsibility is distributed among local or regional governments, with national oversight for consolidating data.
- *integrated/mixed systems***:** two or more institutions or agencies share responsibility (e.g., health ministries registering deaths and justice ministries handling civil records), which is common but can create complex, fragmented data streams.

The centralized system

From an organisational perspective, a centralised organisational structure can prove very effective in meeting the goals and most efficient in managing and operating the systems, being responsible for directing, coordinating, monitoring, and evaluating the nationwide civil registration work, as well as setting national standards for all activities within the system. The level of centralisation of civil registration systems varies across countries. Indeed, even within a single country, one aspect of the system may be more centralised than others.

In countries with a centralised registration system, the legal responsibility for civil registration is usually assigned to the Ministry of Interior, Ministry of Justice, Ministry of Health, Prime Minister's Office and others, but there are countries which chose to assign at an independent self-governing entity. (I.I.V.R.S., 1989). A 2017 World Bank survey on institutional arrangements in 169 governments revealed that in more than half of the countries, the central agency for civil registration was established within the Ministry of Interior (85 countries), Justice (30 countries) or Health (12 countries). (U.N., 2023).

The advantage of establishing these services within the ministries is that the systems can benefit from the infrastructure, resources, and expertise already available there. On the other hand, creating and maintaining one or more of these services within an independent body can increase trust in the system, given its non-political nature. Whichever structure is chosen, it is important that civil registration and identity management services be shielded from political influence. The central agencies must be enabled to oversee their management and operations, and also of any local offices of those agencies, having as a key responsibility the drafting of regulations, rules and instructions and to ensure that local officials are conducting duties in a uniform and consistent manner across the country.

In countries with a national registration office, local registration offices may be supervised through the chain of authority within the same Ministry or department, or through another administrative channel, depending on the **organisation of the civil registration system. In general, the central registration offices situated in the** Ministry

of Interior and in the Ministry of Health have a channel of communication through its own Ministry. In most other situations, the national registration office provides technical advice and guidance to local registration personnel under the administrative control of another ministry, usually the Home or Health ministry.

In Europe, the countries with a centralised civil registration system (often operating directly alongside or integrated into a Central Population Register) have a single, master national database for all civil status events (births, marriages, deaths). There were identified 3 models determined by their administrative system:

1. The Nordic and Baltic Model (Hyper-Centralised) "Register Once, Use Everywhere" combines civil registration with universal National Identification Numbers (NIN) in a single, centralised database that dynamically updates across all state sectors. Denmark, Estonia, Finland, Iceland, Sweden, Norway, Latvia, Lithuania.
2. Central and Western European Model (Fully Digitised Central Hubs) realised through the modernisation of the historically local registries by migrating all records into one unified, legally central infrastructure. Belgium, Netherlands (local municipalities update the data in a single, centralised nationwide IT infrastructure), Luxembourg, Italy
3. Southern and Eastern European Unified Systems uniquely blend rigid state centralisation with intense modernisation efforts, were created by countries which have evolved away from fragmented provincial or regional records into highly centralised frameworks: Slovenia, Croatia, Hungary, Albania, Poland, Romania, Bulgaria

The decentralized system

In a decentralised system, local registration offices are administered by state or provincial authorities in accordance with state and provincial laws and regulations, with no national office to direct their activities, except to coordinate the subnational offices responsible for registration. In the capital city of each major division, an authority for civil registration is established to direct and monitor civil registration work. Many countries with a federal political system, a large territory, or a large population may adopt a decentralised system of civil registration. There is no need for uniform legal provisions and procedures in this regard. Many of these countries have developed a standard law and implementing regulations, allowing each major administrative division to enact its own laws and regulations based on that standard. A national agency is needed to ensure the implementation and standardisation of civil registration and vital statistics activities.(U.N., 1998 paras 57-58) Germany, Austria, Switzerland and the UK fall in this category.

The integrated/mixed system

An integrated or mixed system blends elements of both centralised databases and decentralised local execution. Countries typically adopt or move to a mixed system because it solves the distinct vulnerabilities of purely centralized or decentralized models: preserves the "Once-Only" principle, maintains local accountability, protects data privacy via federated architecture. The core concept of this system is: decentralised input, centralised impact. The administrative power is split to maximise efficiency while respecting regional or historical autonomy:

- **Local Delivery:** the activity is managed by completely decentralised, separate entities (like local municipalities or regional health executives).
- **Central Synchronisation: the data introduced in the regional database instantly updates a centralised** national population database, automatically generating national security identifiers.

Several European nations have chosen this mixed architecture to balance intense digital modernisation with deep-seated political traditions of local self-governance: Ireland (the Regional-National Hybrid), the Netherlands (the Municipal Federation Base), and Austria (the Electronic Bridged Model).

3.5. Commonalities and differences

A legitimate question arises. Which system to choose? Choosing one model over the others means trading off different administrative advantages:

Centralised Systems: Maximize efficiency

These systems are built for digital leapfrogging and modern e-governance. By putting all data into a single national "brain", the state can easily enforce the **"Once-Only" principle** (ensuring that a citizen never has to provide a paper birth certificate to obtain a passport or a school placement because the departments share data securely). The primary risk is a single point of failure regarding data security and systemic privacy concerns.

Decentralised Systems: Maximize local autonomy & privacy

Decentralised systems prioritise local self-governance and serve as a deliberate structural check against state overwatch. By keeping databases fractured, they offer strong protection against mass data breaches and centralised surveillance. The trade-off is bureaucratic friction: citizens face a high "administrative burden," often having to mail paper documents by hand between different local councils or regional government silos.

Mixed Systems: Balancing the best of both worlds

Mixed systems are the modern compromise. They allow a country to protect local or regional administrative identity while benefiting from the speed of cloud computing. By allowing a regional body (like Ireland's HSE or the Dutch municipalities) to handle the front-facing customer experience, the system respects local operational styles. However, because the backend is digitally integrated, it ensures the central state still functions with the data speed, precision, and security of a fully centralised environment.

Chapter 4. Digitisation of civil registration systems in Europe

The digitisation of Civil Registration systems across Europe is no longer just a scanning-paper process; it has evolved into an architectural overhaul driven by automated data exchange, national cloud synchronisation, and sweeping European Union regulations. Today, Europe is moving toward a standard in which a "civil event" (such as a birth or marriage) serves as the primary digital anchor for a citizen's entire interactions with the state.

To understand where European countries sit today, their progress can be mapped across three distinct technological shifts:

- **Phase 1: Pure digitisation (legacy paper to electronic entry):** Converting historic paper registry books into PDFs or isolated local databases. Most of Europe cleared this hurdle by the early 2000s.
- **Phase 2: Centralisation (silo to Cloud integration):** Merging independent local town hall databases into a singular national repository overseen by a central ministry. This is where major reforms have occurred over the last decade (e.g., Italy's ANPR rollout or Spain's *DICIREG* transition).

- **Phase 3: Cross-Departmental interoperability (the modern frontier):** Linking the centralised civil register directly to other state systems (Taxes, Health, Social Security, and Education). The data flows automatically, eliminating the need for a citizen to ever manually "prove" an event to another agency.

The modern European approach to civil registration data is shaped by explicit legal frameworks and engineering standards: the "Once-Only" Principle (OOP), the CIEC Standards (Cross-Border Harmonisation) and the 2026 Shift: The EUDI Wallet & "Breeder Documents".

The single biggest catalyst currently forcing European civil registration systems to modernise is the rollout of the **European Digital Identity (EUDI) Wallet**, mandated under the updated eIDAS Regulation. Member states must make these interoperable digital identity wallets available to citizens, enabling them to store and share verified identity attributes seamlessly across all 27 EU member states.

4.1. Examples of successful implementation in Europe

Several European nations serve as leading models for the successful modernisation and implementation of digital civil registration and vital statistics (CRVS) systems:

- **Estonia:** Launched in 2002, Estonia's electronic identity (e-ID) system is anchored by a state-held population register that provides all citizens and residents with an 11-digit unique personal identifier. Rather than a single centralized database, Estonia keeps functional databases strictly separate; these databases communicate securely through the "X-Road" data exchange layer.
- **Lithuania:** Lithuania has achieved remarkable success in automating its civil registry. By 2024, 65% of all civil registry services were provided electronically. Many civil status acts, including deaths, divorces, and the establishment of paternity, are registered automatically (ex officio) without requiring an application from the citizen, receiving data directly from courts, health care facilities, and notaries.
- **Romania:** As of March 2025, Romania operationalised its Integrated Information System for Issuing Civil Status Documents (SIIEASC), marking a definitive shift "from pen to IT system". By September 2025, the system had processed nearly 3 million informatics operations, managing vital records exclusively in electronic format and successfully scaling the system to 3,228 administrative units.
- **Sweden:** Population registration is managed by the Tax Administration, which uses e-services to receive immediate updates on births and deaths directly from health professionals. Other authorities and private entities can subscribe to a "notification register" to receive daily or weekly updates on population data, ensuring a highly integrated ecosystem.
- **Belgium:** Since 2019, Belgium fully digitalise the civil registration system, enabling citizens to obtain official documents from any location. This success is based on an inclusive approach involving the local authorities, neutral institutional coordination, a thoroughly revised legal framework and controlled interoperability with the population register. The use of a single national registration number is another characteristic feature of this system, guaranteeing the uniqueness of each individual and facilitating interconnected governance of public services

4.2 Technological advancements in record collection and management

To enhance security, speed, and data integrity, European nations and other global leaders have adopted advanced technological solutions:

- **Digital Seals and QR Codes:** To eliminate the need for traditional security paper, countries are turning to digital verification. Moldova's new Civil Status Information System issues digital certificates with a QR code for data verification. Similarly, Romania issues digital certificates equipped with electronic signatures and a printed verification link.
- **Secure Data Exchange Layers:** To share data without creating a vulnerable, massive central database, countries use advanced network layers. France implemented the COMEDEC network to enable secure electronic data exchange between decentralised local civil registries and external authorities, such as notaries and passport issuers.
- **Cryptographic Privacy Protections:** To prevent the unauthorised consolidation of personal records, Austria uses a cryptographic function that generates sector-specific PINs from a source identifier. This ensures a person's transaction records cannot be matched across different databases using a common number.
- **Privacy-Preserving Microdata Platforms:** Norway developed an innovative online service (*microdata.no*) that gives researchers instant access to analyse population register data. The platform has built-in digital disclosure controls: the actual data remains completely invisible to the user, and all outputs are automatically screened to be confidentially safe.
- **Offline-to-Online Syncing:** For remote regions lacking internet access, countries like Mongolia have innovated offline software that utilises machine-readable QR codes. Local registrars print an official form with a QR code containing the event's data, which is physically transported to a provincial hub and scanned directly into the central online database, eliminating manual data entry errors.

Chapter 5. Romania- from pen to IT system

The history of civil registration in Romania mirrors the broader European transition from ecclesiastical "mitrical" books to civil administration, though its development was uniquely shaped by regional political changes.

Until the 16th century, civil status was not subject to any secular or religious record-keeping; a person's civil status was determined by notoriety and possession. Proof of births, marriages, and deaths was provided through testimony and presumption; thus, when a child's age needed to be determined, this was established through the combined statements of the godparents and the priest who baptised the child.

Civil registration was established in Romania in 1817 with the Caragea Code, which stipulated the creation of a register in each district to record civil status events. However, the true turning point was the 1864 Civil Code, which officially transferred responsibility for "civil status" records (starea civilă) from churches to city halls (Mureșan, 2005).

The foundations of the current civil registry system in Romania were laid with the adoption of the new Constitution in 1991 and a new Law on Local Public Administration, which led to the drafting and adoption of Law No. 119/ 1996 on civil status records, which unified all the legal norms governing civil status and provided solutions for resolving entirely new situations. Also, in 1980 was introduced a core identifier for each Romanian citizen, the personal code called **CNP** (*Cod Numeric Personal*) with 13-digits, assigned to every individual at birth or upon gaining citizenship. The CNP is highly structured, embedding information about the person's birth century, gender, date of birth, and the specific county code where the birth was registered. Because the CNP links all central records together, it acts as the primary key connecting civil status, biometric identity cards, tax structures, and passports.

5.1 Current structure and framework

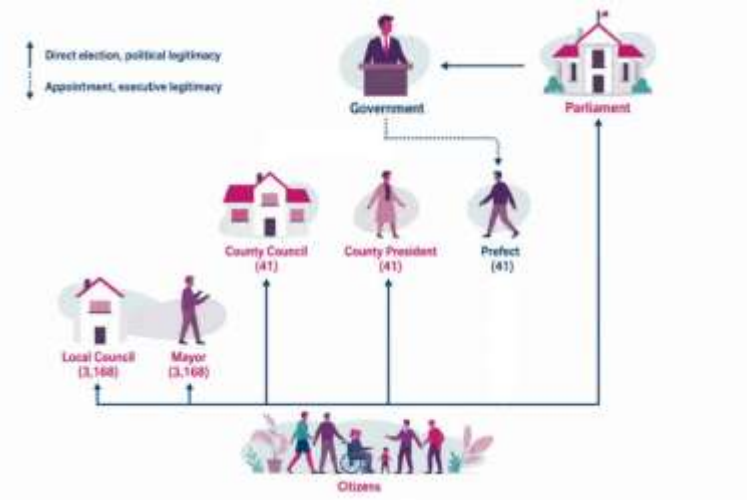
Romania fits into the Southern and Eastern European Unified model, operating a highly centralised civil registration system that has undergone an aggressive digital transformation. While everyday administrative processes in Romania have historically been slow and paper-heavy, the backend system is strictly top-down, standardised, and integrated under the national government.

The public administration system in Romania is organised on two levels: the central level (government, ministries, and other central bodies) and the local level (counties, municipalities or cities, and communes).

The structures of the central public administration are the government, ministries and other central bodies.

The local public administration is organised in every county, city, town and commune. The authorities of local public administration are:

- County level – County council- elected, the legislative
  - President- elected, the executive,
- City/town/commune – Local council- elected, the legislative
  - Mayor- elected, the executive



Civil registration activity is performed in each legal administrative-territorial unit (county, city, town, commune). The civil registration system is unique, not only for the services provided, but for its double subordination to two different

ministries: organizationally, it is subordinated to the county and local councils under the Ministry of Administration, methodologically, it is subordinated to the Ministry of Internal Affairs through the General Directorate for Civil Registration.

5.2 SIIEASC

Romania's civil registration system is currently undergoing a massive structural transformation characterised as a move **"from pen to IT system"**.

On March 31, 2025, was put in place all over Romania, the Integrated IT System for Issuing Civil Status Acts (SIIEASC) a platform which has shifted from relying on traditional, physical handwritten registers to managing electronic vital records (births, marriages, and deaths) and digital certificates .

The core objectives of SIIEASC

1. Digitization of civil status documents issued in the last 100 years, related to primary life events: birth, marriage, divorce, death;
2. Electronic archives of digitized documents;
3. Removal of information redundancies from the local and central civil registration system;
4. Reducing the time required to process civil status data transactions as well as the costs for data storage paid by the local and central governments in connection with 5 services related to the 4 major life events: birth, marriage, divorce, and death;
5. Increasing the degree of interoperability of central and local systems that process civil status information specific to services correlated with the 4 primary life events;
6. Increasing the level of collaboration and communication between local communities and public institutions in the issue of civil status;
7. Implementation of G2C/G2G services by providing the necessary support for the development of electronic services based on basic civil registry information.

Structurally, the system spans the entire country, providing digital access to all the civil registrars operating within **3,168 administrative-territorial units**. Furthermore, this framework is expanding internationally, the electronic services being interconnected with Romania's diplomatic missions abroad.

These reforms are driven by a broader national priority to improve the efficiency and accessibility of public services and align Romania's administrative frameworks with European Union standards. As noted by experts in the field, this transition requires a balanced legal and policy approach that integrate not just technological upgrades, but also necessary legal and social considerations.

Critical impact on the public sector: SIIEASC brings three structural upgrades to Romania's governance framework:

- Centralization of Historical Data: It eliminates the traditional issue of decentralized record-keeping by scanning, indexing, and digitally storing over 100 years of historical paper records into a single queryable database.
- Interoperability: It connects directly with the *National Registry of Persons Evidences* (RNEP). When a death or marriage is recorded, the individual's Personal Identification Number (*Cod Numeric Personal* - CNP) updates system-wide automatically.

- Elimination of Bureaucratic Silos: Citizens no longer need to physically travel to their exact town of birth to claim a lost or damaged certif

Administrative Impact: The system successfully transitioned 3,168 territorial units to manage vital records exclusively in an electronic format. The immediate administrative impact was vast; by September 8, 2025, the system had already processed nearly 3 million digital operations and issued approximately 903,000 digital certificates featuring secure verification links.

Impact on Society and Governance: The modernisation fundamentally transforms the relationship between the Romanian state and its citizens, strengthens the country's legal and social frameworks by aligning with European Union standards and vastly improves the accessibility of public services. It shifts the focus from administrative record-keeping to **transforming a "de facto existence into a legally recognised person,"** thereby acting as a powerful mechanism for social protection and economic security for the Romanian population. Experts emphasise, however, that to fully realise these benefits, Romania must continue to keep a balanced approach that pairs technological upgrades with necessary legal and social considerations to ensure no vulnerable populations are left behind.

Role of local versus national government. While the new SIIEASC platform acts as a centralised, national digital infrastructure, the administrative work remains highly decentralised in its execution.

- **Local Government:** The day-to-day administration and data entry are handled at the local level. Civil status officers in the 3,168 local administrative-territorial units, along with local entities like the Municipal Council of Iasi's Local Directorate for Population Records, act as the primary access points for the public to register vital events.
- **National Government:** The national government provides the overarching unified digital platform (SIIEASC) and the legal framework (Law no. 119/1996, HG 255/2024) that binds these local units together. The central system also ensures that data flows seamlessly between the local municipalities within Romania and the national diplomatic missions operating abroad.

Future Prospects and Recommendations

Following the nationwide implementation of SIIEASC (the Integrated Information System for the Issuance of Civil Status Documents) in March 2025, Romania has successfully transitioned "from pen to IT system," managing vital records exclusively in electronic format. To maximise the benefits of this massive digital transformation, Romania must adopt a **balanced approach that incorporates technological, legal, and social considerations**. Improvements should focus on deepening the integration of the civil registry with a broader Digital Public Infrastructure (DPI), ensuring that vital data can automatically populate functional databases to improve service delivery and reduce identity fraud. Furthermore, Romania must ensure its newly digitized system is universally accessible, proactively removing barriers so that vulnerable and rural populations are not excluded from obtaining legal identity and accessing essential services.

Adopting best practices from other European nations To further strengthen its civil registration and identity management, Romania and other transitioning nations can look to successful European models:

- **Automated (Ex Officio) Registration:** Romania could “copy” Lithuania, where civil registry offices automatically register deaths, divorces, and paternity acknowledgements, using data sent directly from health facilities, courts, and notaries, effectively removing the burden of application from the citizen.
- **Privacy-Preserving Interoperability:** To share data securely without creating vulnerable centralised databases, countries can adopt Estonia's "X-Road" data exchange layer, which links strictly separated functional databases, or France's COMEDEC network, which facilitates secure electronic data exchange among decentralised municipal registries, notaries, and passport authorities.
- **Inclusive Identity Assignment:** Following Norway's example, the system should universally register all births—including those of children born to refugees and migrants—and automatically assign a unique national identity number upon notification from the health sector, regardless of the parents' legal residency status.

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