Standardisation of Internet Domains Representation in Central Public Administration – "GOV.RO" Domain

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Abstract: The use of new technologies makes a bridge between the basic components of modern society, the public administration closer for instance to citizens and business environment, whereby ordered indexation of public information among public administration institutions and its organized provision to its beneficiary. At the same time, the interconnection need among public administrations from the European Community member states is a serious reason for the implementation of some coherent representation policies and standards' adoption (state governmental policies) for central and local administration. The "gov.ro" domain is the internet domains ending under which public administration is generally known, whereby internet. The representation standardisation of central administration authorities at informational level provides consistency and an organized coordination of resources made available to citizens, for an efficient, operative and quality interaction among government, citizens and business environment.

Keywords: public administration, domain, internet, standards, standardize, identity, internet domains, standards, identitate, e-government, information technology, government portal

Introduction

An efficient, operative and quality interaction among basic components of modern society, government, civil society, citizens and business environment requires the use of the newest communication channels via modern communication technology and strategy.

A first step is representation standardisation at informational level and unification of central public administration authorities from Romania. The representation standardisation entails uniformity (concentration) of resources (information, services) which central public authorities make public via internet. The unification within a single domain (gov.ro first level domain) of representation into virtual internet space, of structures from Government's central apparatus entails a boost in quality and amount of communication among administration, citizen and business environment.

The uniformity of the domain names of central and local public administration's web pages, presented as an ordered collection of links ending with

"gov.ro", assures the user (citizen, business environment) that he accesses an official website of a public administration organisation.

This regulation mainly aims at setting up a Governmental INDEX (Web Guide of public administration from Romania) whereby concentration of IT resources for an easy access to internet pages and finding of relevant information about their activity.

The Governmental INDEX facilitates the user's information via electronic means about services whereby which public administration interacts, as well as ways to achieve this.

The implementation of such an approach is one of the basic principles of e-government concept, by facilitating the setting-up of a cooperative, uniformly represented and identifiable environment for cooperation among citizens, private sector and public administration authorities. The publication of data basis associated to this project on an information portal is instrumental for creating a virtual, modern and easily accessible space within activities aiming at the implementation of the e-government strategy and concept in Romania.

The passing of an Executive Decision for this purpose is the pre-requisite framework for e-government in Romania, introducing in the public administration a unitary representation identity via internet. At the same time, the unitary presentation of public institution representation among public administration of EC member states is an identification modality within inter-state governmental structures from European virtual space.

Good practice cases

The most important world states adopted the citizen oriented government via new technology entailing ensuring the citizen oriented services by means of a single distribution window. The e- government is an instrument for providing citizen oriented services, on a permanent(non –stop) base, via a multitude of channels, including web portals, multifunctional IT systems meant to ensure a single access point to relevant information and services, via web interference.

Good practice examples in the field such as gov.uk in Great Britain, gouv.fr in France, gv.at in Austria show that governmental authorities from these states created a set of rules and a highest administrative level body for the management of the national/ federal governmental domain. Such cases can be met in US, Australia, UK, and Austria.

United States of America

In US, the registration service for the ".gov" domain name (internet domain used by the US administration) is ensured by US General Service Administration (GSA) in charge of the on line registration, validation, processing, activation and administration of ".gov" internet domain.

GSA was set up in 1949 for streamlining the activity of some federal institutions, by that time it included more federal agencies with role in the logistic

management of goods during war. In time, the agency took over new civil structures; its role became a civil one, providing services to citizens and federal administration employees.

By the end of 90s, GSA adopted the new technologies, launched the e-government initiative and it contributed to the federal administration development on internet. At the beginning, the registration of a ".gov" sub-domain was allowed only to agencies, departments, programmes and civil federal commissions, but as of 2003, this is allowed to all US state and local authorities.

At present, the www.usa.gov portal ensures the access of users to the US administrations' departments and units, either via direct link, accessing the domain of interest or via search engine.

Australia

The "gov.au" governmental domain is administered by the Australian Government Information Management Office (AGIMO), functioning within the Finance and Liberalisation Department.

The www.domainname.gov was set up for the registration of all federal and local administration services from Australia, except those from Northern Territory and Tasmania which, although have sub-domains in 'gov.au", created their own sub-domain registration sites. Within the federation, each state set up rules for the registration of administration services from state and local level so that the sub-domains are included in the numestat.gov.au sub-domain. For instance, "qld.gov.au" is the government portal of Queensland (QLD) state and "health.qld.gov.au" is used by the Governmental Department for Health from Queensland.

Great Britain

The e-Government unit from the UK Government is in charge of coordinating the process of securing IT support for the Government to provide more efficient public services. Among other activities, this governmental structure administrate the "gov.uk" domain and to this end, it set up and periodically updates the rules for the registration of sub-domains for public administration, which are part of the guide book for building governmental websites in UK.

The organisations that can register as sub-domain in "gov.uk" are:
- agencies, departments and British governmental administration;
- local and regional bodies, including the towns and local councils;
- other institutions of public interest and for projects

The registration of a sub-domain in "gov.uk" is done electronically, following the steps from the registration regulation and filling in the electronic application with data on institution, name of requested domain, details about the requested sub-domain (the information contained by the site).

For ensuring a unitary presence of British public administration on internet, the "gob.uk" domain administrator makes available to institutions a genuine guidebook on government site building so that the user can find the information he is looking for.

Austria

The Digital Austria Platform ((http://www.digitales.oesterreich.gv.at/) is the federal government's coordinator and strategic committee for e-government in Austria. It provides access to all electronic public services of public administration, made available to citizens.

"GV.AT" is the internet domain for all public institutions within the Confederation of Austria and for all the institutions within Austrian states, towns and municipalities. The "gv.at" domain name is directly assigned by the Federal Chancellery of Austria to each titular of sub-domain on the basis of the set rules.

For a unitary presentation of public institutions from Austria, the public institutions are urged to provide information services within a single framework – "gv.at". This principle ensures confidentiality and trust, so that the user is assured that the respective services and information is indeed official. We can say that the "public administration" syntagm is synonym with the "gv.at" domain.

Study on the internet domains within the central administration from Romania

It is worth noting the global trend of representation within the central domain of central state authority (government) of institutions with sector responsibilities and an implementation of the services provided by them to citizens.

Thus, the central domain becomes the development base for all competence fields of state and the provided electronic services are accessible within a unitary and interdependent framework so that once a government site accessed, the citizen can interact with any institution.

In this respect, there has been conducted a study/ research on the internet fields available to citizens and business environment in the contact with central public administration, on the basis of two work instruments:

1. easiness of finding a domain associated to public institution in the virtual space and

2. degree of relevance of the domain name in compliance with: name of institution and/ or competence domain.

The premise for conducting this study is "the Ministry's activity with the aim of setting up and developing the sector it is in charge of. A site development is a considerable investment (logistics) for a Ministry, taking into account the internet communication capacity with the specific public".

The study on domain names and public institutions representation in virtual space has been conducted at the central public administration level (a number of 18 central authorities - Ministries).

The evaluation of the easiness of intuitive finding of domain associated to institution and of relevance of representation in virtual space of internet domains outlines the following elements:

Tough points
- Each institution structures the information according to its activity field;
- The public institutions have already bought ".ro" domains by means of which they are known on internet;
- Each institution set up its own rules, IT policies, development strategies;
- The websites' frequent users got accustomed to the current form and structure.

Weak points
- Lack of a unitary system of internet presentation of public administration – web standardisation for public administration;
- Lack of a sector index within public institution framework;
- Frequent change of the name of public institutions and emergence of new institutions entail acquisition of new names of ".ro" internet domains;
- Information is not structured and presented unitarily, being hardly to access even by internet experienced users;
- In the lack of a joint platform, the citizen cannot be sure if the website belongs to a public institution.

The internet domains of central administration public institutions are represented by:
- Initials
- Abbreviations
- Acronyms

The Study on the representation of central public administration institutions' internet domains reveals a high diversity level in the domain names they use for virtual representation (Figure 1).

For development of some coherent policies for the development of institutional virtual representation, more worldwide currently existing concepts/ trends from e-government sector have been standardized and unified and a strategy

for IT service implementation has been put forward for a unitary and coherent development of e-government services in Romania.
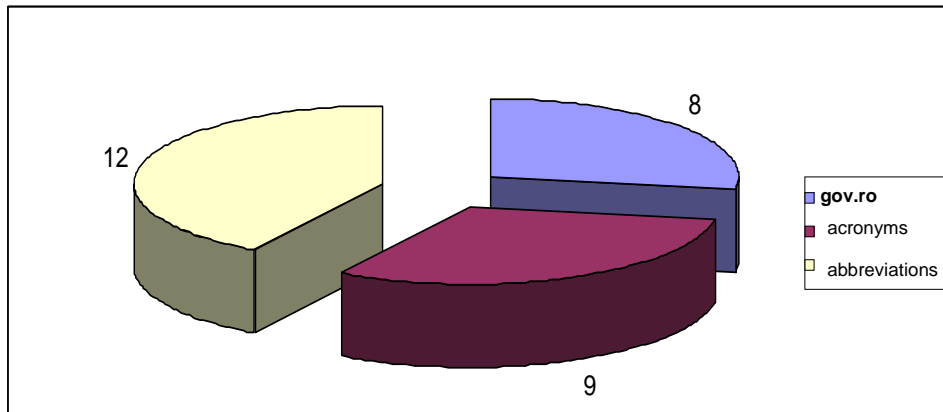

Figure 1. Representation of central public administration institutions' internet domains

Thus, the domains' implementation at governmental level implies the following stages:

- Unification / grouping of official internet domains of public institutions;
- Setting up of a central registry of domains;
- Setting up of an electronic governmental index and of sector indexes with all institutions from central public administration and their unitary updating;
- Implementation of an electronic solution on the government internet domains' management;

The novelty we propose is dissemination between institutions' domain names (ex: ms.gov.ro for Health Ministry) and the coordinated competence domain (namely sanatate.gov.ro) which might lead to centralized sector portals devoted to public institutions' competence field, the domain information core being closer to its beneficiary (citizen, business environment).

GOV.RO domain

One of the reference internet page within public administration from Romania is the internet domain of the Romanian Government, www.gov.ro – proven by the high number of daily entries, being in fact the main information

access gate for entire administration, be it central or local, for all the society's basic components.

The central administration's information gate is a community service with a single entry point, that provides access to information, data and represents a

- Support instrument for an efficient administration in information exchange whereby public communication networks;
- Access instrument to state information services and resources;

The adoption of a regulation in this field meant to set a methodology of sub-domains gov.ro use and assignment and aimed at public authorities from Romania is welcome for a unitary virtual representation of institutions, and playing the role of catalyst for the further development and grouping of intra-governmental platform which may be extended up to regional level.

In Romania, the "gov.ro" domain usage has been regulated whereby Executive Decision 1480/2008 on the implementation of "gov.ro" internet domain at public administration level. The legislative act lays the bases of the regulation, implementation and usage of government internet domain "gov.ro". Detailed information about public institution registration as well as usage rules can be found at http://domenii.gov.ro.

For the coordination of the implementation process, the Directorate General E-Government and IT Projects within Prime Minister's Chancellery was designated as authority in charge of the domain.

Further to the reorganisation of the Executive's apparatus, of March 2009[1], the IT Service within the Secretariat General of the Government became the authority in charge of the domain.

GOV.RO Domain – objectives

Such a regulation on the implementation of gov.ro internet domain at the public central administration level is a measure with immediate impact, its adoption leading to:

- centralized record of public authority internet domains, Governmental Index (Web Catalogue of Public Administration from Romania);
- a coherent visual identity;
- better transparency of central administration in internet virtual space;

The adoption of such a representation standardisation recognized and adopted at the European Community level and world level leads to:

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[1] Emergency Ordinance 17 from 04/03/2009 on the abolition of Prime Minister's Chancellery and setting up some measures to reorganize the Government's working apparatus, published in Official Gazette 145 from 09/03/2009

- Increase in the efficiency of information exchange at central administration level;
- Cut in the useless information search and processing time;
- Increase in the intensity and communicational level whereby information index;
- Information upgrade;
- Increase in the public services' efficiency and quality;
- Use of working unified patterns and instruments in portal;
- Minimizing time and cost of new services' elaboration;

GOV.RO – Management

Upgrading the representation quality is a basic component of quality management system and whereby management activity for development and implementation of a set of coordinated rules and instruments, we aim at ensuring the expected quality level for the representation of public administration from Romania in the virtual space.

The adoption of this regulation in the field takes into account the current situation at the entire administration level, and it does not entail investment on the institutions' part in order to enter the "gov.ro" domain.

The following aspects have been considered:

1. Most central authorities (Ministries, authorities, agencies) have web pages and passage to a new sub-domain of the institutie.gov.ro type does not imply additional cost, since it keeps the previous associated domains too, adding practically a new ending to the associated URL.
2. Activation and use of a "gov.ro" sub-domain by a central administration department is absolutely free of charge, implying no financial cost;

GOV.RO domain – "gov.ro" sub-domains' registration aspects

The adoption of this representation standard for public administration institutions prompts a more efficient information exchange, reducing meanwhile the volume of ambiguities and inconsistencies in the date inter-exchange.

Procedure of sub-domain registration within "gov.ro" domain implies the following:

- Public administration authorities will submit to the domain responsible authority an application for a sub-domain name registration, via email and also on paper, for the start of registration procedure;
- Registration decision is issued only if the applicant institution meets cumulatively the eligibility criteria.

The eligibility criteria and registration guide of gov.ro sub-domain names are set by the authority and are posted on the Government's webpage.

Eligibility criteria

The organisations meeting at least one of the below criteria are authorized to register a "gov.ro" sub-domain:

- Any institution set up through law or regulation issued by Romanian Executive and defined as government department or agency;
- Any government institution from regional, county level (prefectures);

Domain names convention

The sub-domains registration should observe the following rules:

- **Convention on the sub-domain name.** The registered names can comprise only letters from a to z, numbers from 0 to 9 and the special character "-". The maximum number of characters of a domain name should not go beyond 63 characters, the minimum number being 3. The sub-domains names are not case sensitive (both capital and small letters can be used). Special spaces and characters (for instance !, $,&, etc) are not allowed.
- **Convention on the domain name' semantics.** The name by which the authorities register themselves should represent either the authority name or the name of their activity field.

"Gov.ro" sub-domains' registration guide sets the following:

- Choice of a sub-domain name;
- Sub-domain name management;
- sub-domain name withdrawal/ suspension;
- sub-domain name transfer ;
- domain name deletion

Domain related responsibilities. Conflict / dispute resolution

- in case the eligibility criteria are met, the authority issues in 10 days at maximum, from application registration, the decision for name registration of a requested sub-domain.
- The authority can decide to reject the sub-domain name registration if the registration application is incomplete and does not observe the sub-domain name convention. Provided the registration application is rejected, the authority communes to the applicant institution the rejections reasons, in 30 day deadline.
- The authority can decide, according to the case, the suspension or withdrawal of a sub-domain name.

The suspension of a sub-domain name is done:
- When it is administered in a damageable way for the domain name system - a hierarchical naming system providing information on the name and address of various internet resources);
- When the registration data changed and the authority has not been informed in due time about it;
- When the authority notices an inappropriate administration;
- When the use of a certain sub-domain name creates confusion among other internet users;
- When it is faulty used.
  - The suspension of a sub-domain name is decided by authority on a 30 day interval;
  - The sub-domain name withdrawal is done in the following situations;
- on the applicant institution's request;
- in case of the non – use of the requested sub-domain name for a six month period;
- provided the causes for the sub-domain name suspension have not remedied within a 30 day deadline;
- on the request of an authority higher in rank than the applicant one;

The authority will publish on the Romanian Government's internet page a detailed list of assigned sub-domain names.

GOV.RO Domain – government information portal – introduction

The government portal is a basic component of the "e-Government" system and represents an important support instrument in the government activity, offers the possibility of information exchange, of a dialogue with citizens via communication networks, including internet, and stands for an important point of access to resources and services provided by administration.

An e-Government system is based on the inter-operability between the component systems of an administration as well as system streamlining whereby the re-use of data components and bases.

As measurement units, the implementation of e-government system relies on two indicator categories:
- number of basic public services provided via electronic means;
- number of public service users via electronic means, on their levels of complexity.

The European Community (EC) set a list of 12 public services which should be included in the services provided to citizens via electronic means.

These services in electronic format are divided according to their complexity level;

- Level 1 - Information: provision of information on public services;
- Level 2 - One-direction interaction: on-line form download;
- Level 3 - Bi-direction interaction: forms' processing, authentication included;
- Level 4 - Transactions:information conveyance, decision – making and delivery(including payment via electronic means)
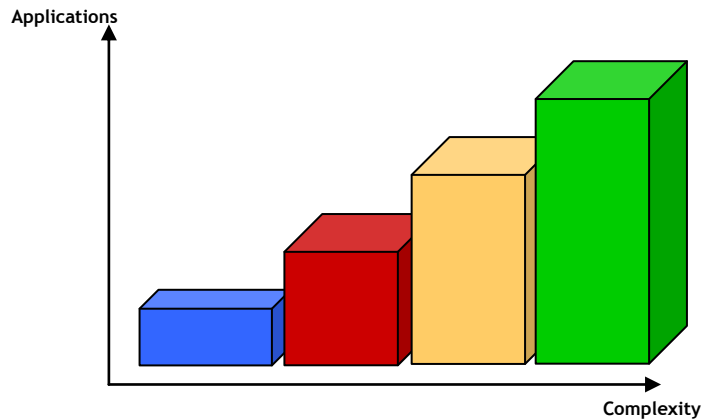

Figure 2. E-government – complexity levels

Currently, Ministries, central/ local public administration authorities, other public institutions and organisations set up and administrate their own official web-pages which interact with citizens under various forms, in the absence of a model of information services to be provided by the respective authorities to citizens. Some authorities provide sophisticate services; others hardly update their internet pages weekly.

The E-Government systems rely on government portals that can be achieved on five levels:

1. a portal providing information and services in a easy manner; it is in fact the first step in a easily readable and accessible content organisation;

2. a portal providing online transaction services via an username and password.

3. third-level portal allowing citizens access to more services by a single authentication, this implying a separation of service and information, such as: authentication, ensuring security, search and navigation;

4. Fourth-level portal allows the data collection from various governmental sources. Fourth level requires cooperation among organisations,

existence and common use of data storage through various databases' interconnection;

    5. fifth-level portal allows people to interact with government in a particular form and provides aggregate information and service in tune with citizens' requests.

The Government's information portal represents the initial contact and interaction point with administration. In this context, the portal access' quantification services become an important part of governmental strategy of upgrading ways of public service provision.

Ministries' internet pages facilitate direct access to public information. The Government information portal should use the same information sources as the institutions' web pages, ensuring a standard communication approach of information irrespective of its conveyance way: online, by phone or in direct interaction with applicants.

Through a more integrate vision on citizen interaction ensured further on whereby correlation of databases comprising information on person identity, their state and dependencies, the government will be able to identify the current real situation of individual and whereby involvement, to acquire a better understanding of future developments. Through model extraction from high data volume, through advanced techniques such as Data Warehousing and Data Mining, the Government can develop a punctual relation with citizens and can provide public services compliant with their needs.

Government's information portal organized under a government guide form facilitates the user's information via electronic means, on elements by means of which public administration interacts with citizens and business environment as well as on ways to complete them.

A first step in defining a conception for the Government information portal development is a coherent outlook on the standardisation of central administration internet representation and includes aspects on the purpose, basic objectives, principles, key characteristics and functionality

The government information portal – information portal's basic objectives

The public administration's activity in the web space relies on the use of such a portal as concentration and access point to the multitude of portals and web pages of public administration authorities: Ministries, bureaus, services agencies, centres, Government's bodies, Parliament and Presidency.

This information portal aims at backing the setting up of a virtual, modern and easily accessible space for the cooperation among citizens, private sector and central public administration authorities within the activities for e-government concept achievement.

The information portal users interacting with public administration authorities with access to internet services are the following:

- Citizens, within Government – Citizen elation (G2C);
- Business environment representatives, companies, within Government – Business Environment relation – (G2B);
- Government authorities – within Government – Government relation (G2G) and Government – its employees relation (G2E);
- Civil society, ONGs, mass-media.

This portal ensures a single electronic information gate and easy finding of information about competent authorities of central public administration as well as citizens' quick access to the respective authorities' regulations, to their services and to ways to upgrade them.

The government portal equally facilitates information, via electronic means, of citizens on legislation and regulations pertaining to its interaction with public administration via portal specific information or suggestions on other information electronic sources.

The e-government portal's main objectives are:

- Provision of a flexible interaction instrument to all participants in the e-government process;
- Facilitation of citizens and business environment representatives' access to information on public authorities' activity, increase in the transparency of decision making process;
- boost in the citizens' life quality

Government's information portal – principles

The web portal organisation should rely on the following principles:

- Citizen orientation- portal structure, contents and navigation should focus on citizens;
- Single access point to public information – portal offers a single access point to public information on central public administration;
- Modularity – flexibility of portal internal structure via use of modular sections;

Standard observation for:

- internet publications and communications;
- interoperability: structure of contents metadata derived from XML language (meta-marking language) compliant with international recommendations and practices;
- services distributed across networks with cooperation technologies oriented towards web services integration;
- accessibility – portal building considers users with disabilities too;

Government's information portal – functionality

The central administration's information portal is a community service with a single entry point, providing access to information, date, links and is instrumental in the activity aiming at an efficient administration in information exchange via public communication networks, internet included, and represents an access points to state information resources and services.

Conclusion

The Government's information portal organized under a government guide form facilitates the user's information via electronic means, on elements by means of which public administration interacts with citizens and business environment as well as on ways to upgrade them.

The "GOV.RO" domain is administered by the speciality directorate within the Romanian Government's central apparatus. For further information on the application, amendment and ownership of a gov.ro sub-domain, please contact this department at it@gov.ro address.

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