



# Digital Government Strategy 2020

**Transforming with equity**

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## Introduction

In the last ten years, Uruguay has followed a strategic path for digital transformation and the Government has established the following fundamental pillars to keep moving in that direction:

- an integral regulatory framework that guides and provides the basis for the digital transformation's regulation;
- a consolidated institutional framework for the collaboration between governmental agencies and with external organisations, with defined roles for each of them;
- a technological infrastructure that is ready to respond to high demand for services and with the required security to protect the citizens' and governmental data.

Currently, Uruguayans use technological solutions in their everyday life so much and in such an intensive manner that they have turned **Uruguay into the most advanced digital society in the region**. Furthermore, Uruguay has received international recognitions for the quality of its digital government, information security, interoperability, citizen service, e-participation, online services, personal data protection, access to public information and electronic signature solutions. These advances have allowed the country to quickly improve its position at international level, making a difference due to its innovative approach to Digital Government policies and to digital technologies' application while keeping the focus on citizens.

## Towards 2020 Digital Government

To keep advancing assertively in this path of digital transformation, the Government has proposed to rely on this digital changes' accelerating instrument that will allow us to:

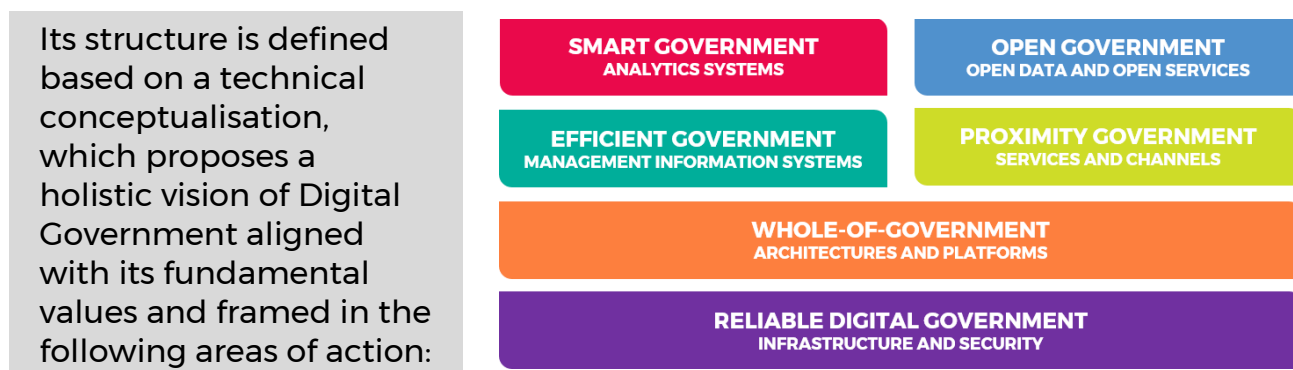
- Create public value through services that meet citizens' needs, expectations and preferences in an equitable, inclusive, efficient, transparent and innovative way.
- Promote the intensive use of technologies such as the Internet, mobile devices, shared platforms and the use of data and information as an integral part of its transformation policies.
- Move towards an omni-channel service strategy for citizens that promotes a homogeneous, inclusive and high quality experience.
- Respect the values that the Government considers fundamental and congruent with its governance's architecture.

With this overall vision, Uruguay has developed its Digital Government Strategy 2020. It defines the objectives and guidelines that encourage the digital transformation in the following ways:

- By being the point of reference for the achievement of objectives and initiatives regarding Uruguayan digital transformation until the year 2020.
- By being an indicative guide of the Government's priorities on the application of digital technologies aiming at improving the relationship between the citizenry and the State.
- By helping agencies to identify gaps and to define their action plans in this field.

## Its structure

The DGS is part of the [Agenda Uruguay Digital 2020](#) that establishes the overall Digital Policy of the country.



Under each of the DGS' six areas of actions, the objectives and goals that the Government aims to achieve in the coming years are established.



# 1. Proximity Government

Proximity Government seeks to improve the interaction between citizenry and the State through high quality services. Citizens expect to be able to rely on intuitive and standardised platforms that are adaptable to their preferences. In this way, by sharing their data with the State once only, citizens can use different services, acknowledge which personal data the State already holds about them and decide which data to share. They are also able to configure the services they need and integrate them in a single point of access.

Following this path, Uruguay is working hard to ensure that by 2020 100% of the Central Administration services can be done online from start to end. The aim is to develop and blend channels to facilitate citizens' access to all States' information and services.

Within this area of action, the DGS seeks to fully exploit the potential that digital technologies have. The goal is to promote an omni-channel service, with high quality services that improve the citizen's experience and their relationship with the state. An omni-channel experience means not only citizens can access services using the Internet, but also that citizens can choose the channel they prefer (e.g. face-to-face, telephone, e-mail, web, mobile, etc.) and obtaining exactly the same result.

## **Objective I: Universalising the e-interaction between citizens and the State**

1. Ensure that all Central Administration services can be started online by 2016 and can be fully completed online by 2020.
2. Standardise the first-level assistance at Central Administration, ensuring quality in service delivery.
3. Provide new and better channels for service delivery, using emerging technologies (e.g. chatbots).

## **Objective II: Providing an integrated and unified access to Central Government's services**

4. Develop a new single point of access to public sector websites and services (gub.uy), with a common interface and information architecture.
5. Implement options of customised information, communications, and notifications for citizens and business at gub.uy.
6. Make available a tracking solution of the status of each government service.

## **Objective III: Promoting a public services' transformation in priority areas**

7. Health: National Electronic Health Record implemented for all health service providers in three strategic areas, and in oncological services. Digital Prescription developed.
8. Education: Electronic Education Record implemented at all levels, and pedagogical administration's systems (GURI)
9. Social Development: National Care System. Farming: National Agricultural Information System.

## 2. Open Government

Open Government aims to promote the pillars of transparency, accountability, citizen participation and innovation. Citizens are increasingly demanding for greater openness in government. They want to participate more in public affairs and seek a way to make their governments more transparent, sensitive, responsible and effective.

When Uruguay joined the Open Government Partnership in 2012, it committed to carry out a comprehensive strategy with objectives and initiatives to boost the Open Government. The proposal is to develop a Government that establishes its priorities and improves its management with its core on citizens' needs. Along this line, Uruguay has already developed three Open Government plans of action, and will have a fourth plan until 2020.

Technological advances allow governments to interact with citizens directly, so that they can exercise their rights in a simpler way. In this sense, the DGS seeks to improve the relationship between citizens and the State through transparency's promotion, data openness, citizens' co-creation and collaboration in public interest's problem solving.

### **Objective IV: Promotion of transparency and accountability**

10. Facilitate citizens' access to public information through its publication in an accessible and open manner, as well as through the implementation of a unified and traceable system for information requests.
11. Verify regulatory compliance in access to public information by public institutions and making the results transparent through evaluations' online publication.
12. Implement an Open Government citizens' lookout website for publishing and following-up citizens' ideas and demands.

### **Objective V: Building a participatory and collaborative government**

13. Strengthen citizens' participation mechanisms through the development of a methodological framework, of reusable digital solutions and good practices for its adoption by State agencies.
14. Provide an online catalogue of citizens' participation instances, including feedback and citizens' satisfaction levels.
15. Implement citizens' innovation funds through a sustainable process of co-creation between the Government and civil society representatives, entrepreneurs and companies.

### **Objective VI: Promoting the availability of data open by default**

16. Expand and improve the open government data offer at the National Open Data Catalogue and having tools to facilitate its access and visualisation.
17. Deepen the culture of openness by default, promoting international standards' adoption related to open budget, finance, procurement, parliament and justice.
18. Establish guidelines, good practices and training actions to ensure open data by design in all stages of software development.

### 3. Smart Government

Smart Government conceptualises the use of data, information and knowledge as government assets. This intends to optimise public services, to provide integrated and proactive services' experiences, to strengthen the interaction with citizens and the co-creation of public policies.

The adoption of digital technologies in the interaction between citizens and the State generates large volumes of data. Governments should be able to exploit existing information and use it to move towards a more proactive attitude, that anticipate the needs of citizens and prevents problems. To make this viable, the DGS stresses out the need for the development and strengthening of technological capabilities, for regulatory policies and for good practices in information management.

#### **Objective VII: Strengthening evidence-based decision making processes**

19. Develop a methodological framework, an architecture, a platform and good practices for descriptive data's analysis, to be used in the processes of design and monitoring of public policies.
20. Implement data analytics solutions in the State to promote an active policy that monitors strategic management, performance improvement and results' communication.
21. Strengthen the implementation of analytical information systems for strategic sectors' management.

#### **Objective VIII: Developing platforms and predictive analytical models for the design of proactive services and smart cities**

22. Define cybersecurity and privacy's regulatory frameworks and good practices for the use of massive data in governmental platforms of big data and IoT.
23. Develop a governmental platform for the application of analytical models to large volumes of data (Big Data, IoT).
24. Strengthen research and development of skills for the use of massive data in the State through tools such as centres of knowledge, laboratories, observatories and communities of practice.

#### **Objective IX: Implementing new services based on the intensive use of data and emerging technologies**

25. Applicate massive data models to State systems for the design of proactive services and for a descriptive and predictive analysis of phenomena affecting the community.
26. Implement analytical models for services and websites in all ministries.
27. Design analytical models for big data and IoT platform to strengthen strategic sectors.

## 4. Efficient Government

Efficient Government develops the bases of the management systems that simplify and unify the transversal processes in state agencies to provide better services. It aims to optimise solutions to reduce operating costs and to modernise processes with a comprehensive approach that is essential for the proper development of digital government.

The Uruguayan State has made progress in adopting cross-cutting solutions that standardise processes and quality in service delivery, such as: notifications and digital communications, digital expedients and government resource planning (GRP).

The DGS aims to improve cross-sectorial management in the State and to promote the adoption of common solutions that contribute to accelerate the progress of Digital Government within the agencies.

### **Objective X: Optimising administrative and documentary management's processes**

28. Establish an integrated architecture for the administrative management in the Central Administration.
29. Conduct the reengineering of State's transversal systems to make better decisions and to increase efficiency (SIIF and e-Procurement).
30. Implement solutions for a comprehensive administrative management in ministries, autonomous entities and local governments. e-Notifications and GRP solutions in agencies.

### **Objective XI: Developing shared technological services and assets**

31. Implement framework agreements and centralised purchases for acquiring technological goods and services.
32. Develop reusable IT components for the State, strengthening the optimisation and quality in their development and use (maturity model in software quality).

### **Objective XII: Advancing in the digitisation of public records**

33. Establish an integrated model for public records management to facilitate and optimise the exchange of information.
34. Conduct the reengineering of civil, property and State property registration systems.
35. Facilitate normative, institutional and technical tools that enable using new technologies for the validity of records such as the use of digital signatures and blockchain.



## 5. Whole-of-Government

Whole-of-Government seeks for the technological integration within the State. It encourages technological integration and data interoperability as a basis for management systems' development and evolution.

In recent years Uruguay has advanced in different directions such as developing an Interoperability Platform that provides multiple services for information exchange between agencies. The government has also worked on the establishment of a common government's architecture with the aim of providing a frame of reference that defines an organisation from the point of view of its architecture. In this way, it provides a common language to facilitate the efficient use by the State of digital technologies.

To keep working on the conception of a Whole-of-Government will allow public organisations to exchange information in a timely and consistent form; in addition, it will also improve the management and the creation of new analysis systems to optimise public policies and services for the citizen.

### **Objective XII: Evolving the digital government platform**

36. Develop a Government Architecture that promotes an integrated and efficient vision of government's information systems.
37. Promote the adoption of a Government Architecture Framework for the Central Administration.
38. Implement a Knowledge Centre in Government Architecture, to generate an ecosystem that adopts and evolves models and frames of reference in the subject.

### **Objective XIV: Developing new interoperability solutions in strategic sectors**

39. Design and implement interoperability architectures considering standards and good practices, particularly in relation to emerging technologies.
40. Develop the National Spatial Data Infrastructure and its platform for unified and updated geographical information and adapted to the territorial reality.
41. Strengthen the use and adoption of these solutions in strategic sectors.

### **Objective XV: Implementing a data architecture that supports government's organisational interoperability**

42. Design the government's data architecture and apply it to the priority projects of the Central Administration.
43. Implement the government's data platform to drive and facilitate the adoption of defined standards and good practices.
44. Make available the federated registers of persons, companies and addresses in the Interoperability Platform.

## 6. Reliable Digital Government

Reliable Digital Government ensures the response to the risks, threats and challenges that arise with the use of digital technologies in the State. It focuses on generating frameworks and making them available to provide security and confidence in the use and evolution of the Digital Government.

The Uruguayan government has worked on the creation of infrastructures and the enabling frameworks with the aim of articulating, managing and promoting security and confidence in the use by citizens of digital technologies (e.g. CERTuy). The DGS proposes to continue advancing in a cybersecurity ecosystem, in risk management and operational continuity, in universalising the digital management, and in privacy and protection of personal data.

### **Objective XVI: Strengthening the cybersecurity's ecosystem**

45. Create a National Cybersecurity Operations Centre with a public-private partnership model to enhancement actions and cooperation.
46. Promote adequate levels of cybersecurity in private sector computer systems.
47. Create a Research and Analysis Lab to improve the fight against cybercrime through the adequacy of the regulatory framework and the development of capacities for persecution and prosecution of crimes.

### **Objective XVII: Promoting risks management and operative continuity**

48. Develop maturity models for cybersecurity and operative continuity.
49. Define the minimum cybersecurity requirements for the critical information assets of the State to mitigate IT risk levels.
50. Audit the adoption and compliance of the models and requirements by the agencies of the Central Administration.

### **Objective XVIII: Universalising the digital ID**

51. Promote a digital ID ecosystem to respond to different levels of security and devices. RootCA and SSO in state agencies.
52. Enable Mobile-ID and Cloud-ID services to facilitate citizens' use of digital identity.
53. Expand the use of the digital ID in the elderly, working together with the Ibirapita Plan.

### **Objective XIX: Updating the Digital Government regulatory framework**

54. Evolve the national legal framework concerning new international standards (e.g. GDPR, IoT, drones, artificial intelligence).
55. Promote a wider awareness of the fundamental right to the protection of personal data in the public agenda and in the formal education, working together with ANEP.
56. Establish good practices on privacy by design in all stages of software development, and promote its adoption by public and private institutions.

## Execution framework

The DGS establishes the main areas of action for the government's digital transformation. In accordance with its mandate, the Agency for Electronic Government and the Information and Knowledge Society (Agesic) of the Office of the President of the Republic will play a role as promoter and incubator of the proposed initiatives, which will be adopted appropriately by each agency.

Through its cross-cutting innovation strategy, Agesic will promote the incorporation of innovative components in each DGS initiative on a permanent basis. These actions will be carried out dynamically and consistently through the application of tools such as the Laboratory of Social Innovation in Digital Government, the Knowledge Centres and the Observatories of Prospective Analysis.

The implementation of the DGS will be constantly and systematically evaluated. In a complementary manner, a quality model of Digital Government services harmonised with regional and international indicators will be created. The purpose of this is to measure the agencies' services provision and the citizens' levels of use and satisfaction with the services.

Annually the government will publish reports on the DGS progress and main achievements. This information shall serve as input for intermediate revisions of the strategy and, if necessary, to update its goals bearing in mind the changes in the environment and the outcomes obtained at the time of the reviews.

**Agency for Electronic Government and the Information and Knowledge Society  
Office of the President of the Oriental Republic of Uruguay**

This document can be downloaded from  
[www.agesic.gub.uy](http://www.agesic.gub.uy)

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