



# digital agenda URUGUAY

15 objectives for 2015

2011-2015 Digital Agenda Uruguay (ADU11-15)

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## 1. Introduction

Taking WSIS Declaration of Principles as ours, this document advances in implementing the commitment to “build a people-centred, inclusive and development-oriented Information Society, where everyone can create, access, utilize and share information and knowledge, enabling individuals, communities and peoples to achieve their full potential in promoting their sustainable development and improving their quality of life”.

A nation that is planning to increase its development in the context of the current era of information and knowledge must face a large-scale deployment of tools based on Information and Communication Technologies (ICT). Therefore, it is critical to establish an enabling framework to promote proper ICT usage and uptake in the specific context of Uruguayan reality.

Although the country has recently experienced periods of economic recovery and social fabric reconstruction, a significant portion of the population still experiences poverty and social exclusion. ICT can and must become a tool to continue improving the well-being of citizenry as well as national development.

Despite being similar to developed countries from a socio-demographic perspective, Uruguayan economy is rather smaller in size and weight, within the same global and highly competitive system. Faced with this situation, if we want to keep up or even increase the economic growth improving as well the welfare of the population, an intelligent use of new technological tools is essential to enhance the quality of education, government services and productive development.

### What is Digital Agenda Uruguay?

Digital Agenda Uruguay, also called ADU by its initials in Spanish, is a dynamic roadmap which set out all these concepts and combines with the government policies and objectives related to development, in the context of the Information and Knowledge Society.

Besides, ADU makes clear the unanimous commitment of all stakeholders, in order to provide the means to accomplish all outlined goals.

Finally, while previous versions focused primarily on setting up the necessary infrastructure to achieve further goals, this third edition of ADU (2011-2015) emphasizes on offering direct and concrete benefits to the citizenry.

### How is ADU structured?

ADU is actually a real tool in planning and implementing projects and not only a set of statements, its distinguishing trait is that it sets clear objectives and verifiable goals.

ADU is made up of the following:

- Strategic lines, which arose out of priorities set out by the Government for this period.
- Action areas, common fields in which related objectives are grouped together.
- Objectives, which may be associated to the concept of a particular project and have a variable number of specific and measurable goals, enabling to assess their compliance degree.

## 2. Strategic guidelines

Strategic guidelines are the foundation on which this Agenda has been developed and are based on government priorities set for this period. Each of the objectives and goals are not only crossed and inspired by these guidelines but also they contribute to their compliance.

- **EQUITY AND SOCIAL INCLUSION** - Create more and better opportunities for ICT use and take up, especially for the most disadvantaged or excluded segments of the population.
- **CIVIL PARTICIPATION** – Promote civic participation, by endowing the agencies with new channels technology-based to hear citizen’s voice, fostering transparency and open data.
- **STATE TRANSFORMATION** – Develop and enhance the technological infrastructure, the interoperability platform usage, the regulatory framework and organizational and processes issues, in order to improve quality of services provided for citizens.
- **FOSTER EDUCATION** – Encourage ICT use in education, training for its use and application, favoring content production and enabling a higher quality on monitoring and evaluating results.
- **INNOVATION AND KNOWLEDGE GENERATION** – Push forward ICT usage to produce added value goods and services, using available research and innovative resources, and creating new ones as well.
- **TERRITORIAL INTEGRATION** – Utilize technology to mitigate or eliminate those gaps arising from the territorial distribution of the population as well as from the concentration of resources and government services.
- **INTERNATIONAL INSERTION** – Consolidate the country’s insertion at regional and international level by fostering agreements on policy and regulatory frameworks needed for the electronic exchange of information.

### 3. Action areas

The action areas and goals for 2011-2015 Digital Agenda Uruguay have been drawn up on the basis of consultation with several key actors and the general public. They are also aligned with the goals of the Digital Agenda for Latin America and the Caribbean (eLAC 2011-2015).

- **ACCESS: “Connectivity for inclusion”**

ICT access is a necessary condition, even though not sufficient, for social integration and bringing the digital divide. The universalisation of broadband and digital TV is the main challenge facing the country in the coming years.

- **EDUCATION AND CULTURE: “Building capabilities for the future”**

The use of ICT in the educational fields has started a veritable social revolution in Uruguay, which laid the foundation for the establishment of a new type of citizenship: a digital one. In this period, it has been chosen to continue this process, expand it and lead it beyond the limits of the formal education system, thus providing everybody the necessary skills to achieve well-being in the Information and Knowledge Society.

- **ELECTRONIC GOVERNMENT: “A modern public administration serving the citizens”**

The use of technology to improve government management is an essential component of electronic government. However, such technology is meaningless unless its ultimate goal is to bring clear benefits to the citizenry, democratizing public services and mitigating territorial inequalities.

### 3. Action areas

- **PRODUCTIVE DEVELOPMENT: “Adding value to the domestic productive chain”**

Technology (particularly the Internet) is an increasingly important support for the country’s productive and economic activity. The added-value that ICT can bring will allow bridging gaps between small and large companies, eliminating inequities in connectivity and increasing productivity and competitiveness. Also, the production of digital content is put forward as an excellent opportunity for the development and intensive use of intellectual capital.

- **HEALTH: “ICT for improving quality of healthcare”**

ICTs are becoming an increasingly important enabler of health system, achieving higher levels of coverage, security in management and better quality of services. They allow targeting on most vulnerable sectors and are essential tools in promoting territorial deconcentration and decentralization with an excellent cost-benefit analysis of care and health status of the population.

- **ENVIRONMENT: “Responsible use of ICT”**

A policy for environmental care should take into consideration the final disposal of e-waste and energy consumption of the various devices. A responsible use of ICT will help to mitigate its impact on the environment and to improve the efficiency of the country’s energy consumption.

## 4. Objectives and goals

# Objective 1: Internet for all

“The universalisation of broadband access in the twenty-first century is as important for growth and equality as were electric power and road infrastructures in the twentieth century” (e-LAC 2011 - 2015). Its democratization is key for the success of the country’s economic and social development model, as well as to ensure a more just and inclusive society.

## ✓ GOALS

- a) 60% of households with broadband connectivity or Next Generation Access through the Universal Internet Household Service 2012 and 80% by 2015.
- b) 90% of small, medium and large enterprises with Internet connectivity by 2015.
- c) 300,000 households with broadband services based on fiber-to-the-home (FTTH) by 2015.
- d) Releasing spectrum for 4G mobile broadband by 2015.

## ⚙️ RESPONSIBLE INSTITUTIONS

Ministry of Industry, Energy and Mining (MIEM) / National Telecommunications Directorate (DINATEL); National Telecommunications Administration (ANTEL); Regulatory Unit of Communications Services (URSEC).



## 4. Objectives and goals

## Objective 2: National deployment of digital and interactive TV

The incorporation of Digital TV to the national broadcast system will not only redound in an improvement of image and sound quality but it also will allow major number of open signals with national coverage and interaction between senders and receivers of content, which is its greatest strength, from a democratic point of view.

### ✓ GOALS

- a) Carry out the digital ignition by 2012 through a public open channel.
- b) Launch the first digital channel with national contents by 2013.
- c) Digital Television coverage equivalent to 60% of the population by 2014.
- d) Carry out the analogue switch-off by 2015..

### ⋮ RESPONSIBLE INSTITUTIONS

National Telecommunications Administration (ANTEL); Ministry of Industry, Energy and Mining (MIEM) / National Telecommunications Directorate (DINATEL); Regulatory Unit of Communications Services (URSEC); Ministry of Education and Culture (MEC); Uruguay National Television (TNU).

## 4. Objectives and goals

## Objective 3: ICT for education

CEIBAL has enabled an important step towards social inclusion and bridging the digital divides. The process initiated by this Plan is not over and this new proposal aims to strengthen efforts to advance at all levels of education and strengthen the educational use of these tools.

### ✓ GOALS

- a) 100% of students of formal public education up to 3rd grade of secondary school, with a personal computer by 2011.
- b) Every public primary and secondary school in towns with a population larger than 10.000 people, with fibre-optic connectivity by 2015.
- c) Distance learning system using telepresence and video conference technologies with minimum coverage in every province capital, by 2013.
- d) A Digital Education Agenda of Uruguay, which describes the educational offering and targets set by all participants from both public and private sectors, by 2011.
- e) Having the "Promoting Academic Inclusion Project" with its "Online Educational Assessment System" as well as specific proposals to enhance language proficiency and logical-mathematical reasoning, by 2013.
- f) Having a high-speed optical network for academic and research projects and distance education all over the country (RAU2) and its connection to the CLARA Network for collaborative projects regionally and internationally, by 2012.

### ⚙ RESPONSIBLE INSTITUTIONS

Ministry of Education and Culture (MEC); Central Board of Directors of the National Administration of Public Education (CODICEN); Ceibal Center for Educational Support for Children and Adolescents; National Telecommunications Administration (ANTEL); University of the Republic (UDELAR) / Central Service of University Informatics (SECIU); public and private educational institutions.

## 4. Objectives and goals

## Objective 4: Education in ICT

This objective seeks to promote education in ICT at all levels and in different specialties, comprising within this concept the dimensions of education, research and extension. Training qualified human resources in ICT is crucial, they are essential to develop an industry which not only has a great potential but also delivers high quality jobs.

 GOALS

- a) Promoting specialization studies in ICT at different levels of education, with projection into all territory.
- b) Having fully operational the Tertiary Institute (ITS) in order to train specialized technicians in ICT, by 2015.
- c) Having a tertiary specialization in Medical Informatics, by 2015.
- d) Fostering research projects and collaboration among the different stakeholders, for an early development of advanced ICT skills ("Butia Project", among others).

 RESPONSIBLE INSTITUTIONS

Ministry of Education and Culture (MEC); Central Board of Directors of the National Administration of Public Education (CODICEN); University of the Republic (UDELAR); public and private educational institutions; National Telecommunications Administration (ANTEL).

## 4. Objectives and goals

## Objective 5: Skills for a digital citizenship

The strengthening of the digital capabilities of the population is, more and more, an essential attribute for its proper insertion and good performance, not only in ICT related industries but also for their economic, social and cultural development in general.

### ✓ GOALS

- a) 180 MEC centers for 100% coverage of the localities between 500 and 5,000 inhabitants by 2015.
- b) National Plan for Digital Literacy established, reaching 100,000 adults by 2015.
- c) 100% of administrative officials of the Central Administration trained in the use of ICT by 2015.

### ⚙️ RESPONSIBLE INSTITUTIONS

National Telecommunications Administration (ANTEL); Ministry of Education and Culture (MEC); National Civil Service Office (ONSC), Agency for e-Government and Information Society (AGESIC).

## 4. Objectives and goals

## Objective 6: Preserve the stock of cultural assets in a diverse nation as part of the Bicentennial

As part of the Bicentennial celebrations framework, the preservation of the stock of cultural assets of the nation becomes a key goal. Access to the national cultural heritage is a basic right that ICT can expand and democratize, also allowing access to cultural assets by various means (Internet, Mobile, Digital TV, etc.).

### ✓ GOALS

- a) "Digital Museum Project" extended to all the museums in the country by 2015, including non-traditional museums like the "Archive of the Word".
- b) Electronic access to the National Libraries System by 2015.
- c) Initiate the digitization of the collections of the National Library, the General Archive of the Nation and 4 other key libraries for the advancement of research in the country, by 2015.

### ⋮ RESPONSIBLE INSTITUTIONS

Ministry of Education and Culture (MEC).

## 4. Objectives and goals

## Objective 7: Modernizing public sector management

A modern public management based on the interoperability of products and services simplify formalities and services provided. Through access to information and delivery of online formalities and services, citizens could get results in a faster and cheaper way, without regional inequalities and limitations imposed by office hours.

### ✓ GOALS

- a) 80% of the most used administrative formalities of central government, available electronically by 2015.
- b) Electronic file for central government by 2015.
- c) 60% of the total volume of formalities of central government, automated by 2015.
- d) Integrated Administrative Management System implanted in all ministries by 2015.

### • RESPONSIBLE INSTITUTIONS

Agency for e-Government and Information Society (AGESIC) and organizations involved.

## 4. Objectives and goals

## Objective 8: Electronic access to public administration as a civil right

Inclusion, opening up and participation are three pillars of an adequate citizen-oriented public administration. In this sense, priority is given to initiatives promoting electronic access to public administration, making easier the interaction between citizens and government.

### ✓ GOALS

- a) Promote the legal framework to ensure citizen's right to interact electronically with the Government by 2012.
- b) System for e-communications and e-notifications at central government implemented by 2015.
- c) Ensure that all officers, citizens and enterprises have advanced e-signature to interact with the government, if their job requires it, by 2015.
- d) Promote that 80% of central government agencies have standards and models for e-interaction and e-participation by 2015.
- e) Develop open government data infrastructures and promote their usage through public-private collaboration by 2015.

### ⚙️ RESPONSIBLE INSTITUTIONS

Agency for e-Government and Information Society (AGESIC) and organizations involved.

## 4. Objectives and goals

**Objective 9: An integrated government**

An integrated government implies moving forward the idea of the Government acting as a unit, both from the standpoint of the administration and the citizen. Efficient use of ICT allows the simplification and unification of processes, avoiding requesting information that the government already has.

**✓ GOALS**

- a)** Certifications of proof for information that the government already has, are not required by 2015.
- b)** Having unique electronic identification for companies and individuals, to use e-government applications, available by 2015.
- c)** Six one-stop-shops by 2015 (government jobs, public security, foreign trade, housing, for citizens, and for enterprises), accessible through multiple channels, including web and mobile.
- d)** Integrated System of Information for the Social Area implanted by 2013, with a single register of social policies beneficiaries.

**• RESPONSIBLE INSTITUTIONS**

Agency for e-Government and Information Society (AGESIC) and organizations involved.



## 4. Objectives and goals

## Objective 10: An efficient and reliable public administration in the use of ICT

The availability of reliable and effective technology solutions in their cost / benefit relationship will be achieved only by strengthening the IT units at public administration and with the coordination and consolidation of efforts among them.

### ✓ GOALS

- a) Reducing to one-third the data centers of central government through its consolidation, by 2015.
- b) Consolidate the State intern communication networks into four: education, security, health and administration
- c) Having the national public key infrastructure (PKI) by 2012, available nationwide and compatible with Mercosur standards.
- d) Having a nationwide spatial data infrastructure system by 2013..
- e) Internet Protocol version 6 (IPv6) installed on all central government IT equipments directly connected to the Internet, by 2015.

### ⋯ RESPONSIBLE INSTITUTIONS

Agency for e-Government and Information Society (AGESIC); University of the Republic (UDELAR) / Central Service of University Informatics (SECIU); and other organizations involved.

## 4. Objectives and goals

## Objective 11: Development of Electronic Commerce and initiatives for financial inclusion

E-commerce contributes to save time and money in each transaction, benefiting consumers and businesses. By favoring opening up and market diversification, enhances the integration of domestic enterprises in the global economy (especially SMMEs). Financial inclusion of the entire population allows access to financial services to lower income sectors, makes easier the development of e-commerce and boosts the economy as a whole.

### ✓ GOALS

- a) E-invoices and e-tickets available for all domestic enterprises by 2014.
- b) One-stop shop for foreign trade in operation by 2015.
- c) Foster the development of a national legal framework that promotes and regulates e-commerce by 2012.
- d) Promote during 2012 the development of the regulatory framework and the technology platform to facilitate financial inclusion to the whole population.
- e) Having a multi-channel platform for e-payment enabled at all public administration services by 2015.

### ⚙️ RESPONSIBLE INSTITUTIONS

Agency for e-Government and Information Society (AGESIC); Ministry of Industry, Energy and Mining (MIEM); Ministry of Economy and Finance (MEF) / General Tax Directorate (DGI); National Customs Directorate.

## 4. Objectives and goals

## Objective 12: Promote development of software and digital contents industries

Fostering the development of software and digital contents industries is essential to economic, cultural and social development of the country, as these enterprises have an increasing weight in the national productive matrix. It is necessary to boost the strengthening and creation of new opportunities for local industry of content and applications, improving this way the diversity and quality of the offer.

### ✓ GOALS

- a) Reach a connection price that is competitive for the development of these enterprises and other domestic industries by 2012 and keep it up that way forward.
- b) Promote the creation of the centre for development content, interactive applications and digital lab by 2015.
- c) Consolidate the "National Digital Contents Competition" by 2013.
- d) Promote increased exports of IT, in order to achieve a significant annual increase, set at 25% for 2012.

### ⚙️ RESPONSIBLE INSTITUTIONS

Ministry of Industry, Energy and Mining (MIEM) / National Telecommunications Directorate (DINATEL); Uruguayan Chamber of Information Technology (CUTI); Ministry of Education and Culture (MEC); National Telecommunications Administration (ANTEL).

## 4. Objectives and goals

## Objective 13: Adding value to the agro-livestock chain

ICT are optimal tools in adding value to agro-livestock production chain, fostering this way the development of local knowledge and the opening of Uruguayan products to new and more demanding markets.

### ✓ GOALS

- a) Establishing the National System for Agro-livestock Information (SNIA) by 2015, based on experience gained in the Cattle Traceability System.
- b) Establishing the single register of agro-livestock producers by 2014.

### ⋮ RESPONSIBLE INSTITUTIONS

Ministry of Livestock, Agriculture and Fisheries (MGAP).

## 4. Objectives and goals

## Objective 14: Advanced networks for health and integrated electronic medical record nationwide

ICT have great potential for improving the management of health services. The connectivity of hospitals and the informatisation of medical records, reduces costs and improves the quality of care received by users. Likewise, telemedicine and integration into regional networks are key issues to medical progress in this field.

### ✓ GOALS

- a) Having a network of health data by 2012, integrated with the advanced academic network RAU2, for sending and processing of images, give support to the medical records platform and facilitate collaboration and research at national and regional levels.
- b) Implanting a teleradiology system on the network covering at least 50 health centres.
- c) Create and manage, starting by 2012, an electronic medical records platform that ensures the availability of information with the necessary mechanisms for security and privacy protection.
- d) Creating the National Bank of Electronic Medical Records, whose main purpose will be the platform management.

### ⋯ RESPONSIBLE INSTITUTIONS

Ministry of Public Health (MSP); Public and private healthcare providers; Agency for e-Government and Information Society (AGESIC); National Agency for Research and Innovation (ANII).

## 4. Objectives and goals

## Objective 15: Responsible use of ICT for environmental care

ICT can contribute significantly to cushion and reduce energy consumption and environmental pollution, as well as its impact on climate change. However, ICT themselves are also a source of pollution, mainly due to short life cycle of many devices and their high energy consumption. Therefore, it turns necessary to adequately plan their final disposition.

### ✓ METAS

- a) Promote the design of the National Plan for Electronic Waste by 2013.
- b) Guide of recommendations and rules on energy consumption to be applied on electronic devices, formulated by 2012.

### ⋮ RESPONSIBLE INSTITUTIONS

Ministry of Industry, Energy and Mining (MIEM); Ministry of Housing, Spatial Planning and the Environment (MVOTMA) / National Environment Directorate (DINAMA); Congress of Intendants.

## 5. Enabling framework

To properly comply with the objectives of the 2011-2015 Digital Agenda Uruguay is necessary to establish a framework that enables the advancement of goals and objectives, as well as the specification of monitoring and evaluation mechanisms for their enforcement. To this end, the following actions are set:

1. Consolidation of the Observatory for the Information Society, whose mission is to monitor and analyze trends that impact on the compliance of the Digital Agenda objectives. Its task will be carried out in close interaction with regional peers (Observatory for the Information Society in Latin America and the Caribbean - OSILAC).
2. Tracking the statistical information with the purpose of monitoring the specified indicators.
3. Mechanisms for assessing progress on the goals by the Project Management Office of AGESIC.
4. Meetings of the Honorary Advisory Board for the Information Society (CAHSI) for the assessment, monitoring of the goals and approval of relevant changes, within a concept of dynamic agenda.

**Responsible institution: AGESIC.**



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