

E-Government in Spain: Act 11/2007 a boost for the sustainability of Society and Administration

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Introduction

One of the conclusions of the 2010 E-Leaders Meeting organized by the OECD, which brought together the Chief Information Officers and their equivalents of the OECD Member States, was **the need to show proof of the benefits of E-Government.**¹ After more than a decade of intense implementation, and in the midst of an economic crisis without recent historical precedents, E-Government must clearly demonstrate its contribution to public value and to the construction of more sustainable society and government in economic, social and environmental terms.

The development of E-Government in Spain over the last five years has been a success, in qualitative terms. The launching of the *Plan Moderniza* led to the development and passage of Act 11/2007; its purpose was to **make citizens' right to choose the means by which they communicate with the Public Administrations into a reality, and this in turn became a national project**, adopted by the Public Administrations and the major political parties. According to the data presented in the 2010 report on e-government² drafted by the Fundación Orange, 77% of the most important services provided by the Autonomous Communities can be processed electronically, and citizens can process 98% of their procedures with the General Administration of the State electronically. The time has come, however, to make the leap from quantitative to qualitative evidence.

Providing quantitative evidence of how the implementation of e-government in Spain has contributed to sustainability is difficult because there is no international agreement on how to do so. Without precise and common indicators, the good practices followed in the countries in our sphere must be considered by in order to come to **an initial figure estimate of the effect of the implementation of ICTs in Public Administrations.** It should be noted that such an estimate can be made for the Spanish General Administration of the State (hereinafter, "AGE", its Spanish abbreviation) thanks to its continued efforts to collect data, data that is not available for the Public Administrations of other countries in our sphere and but that serves as the basis of this paper.

¹ http://www.oecd.org/document/43/0,3746,en_21571361_39745767_46189611_1_1_1_1,00.html

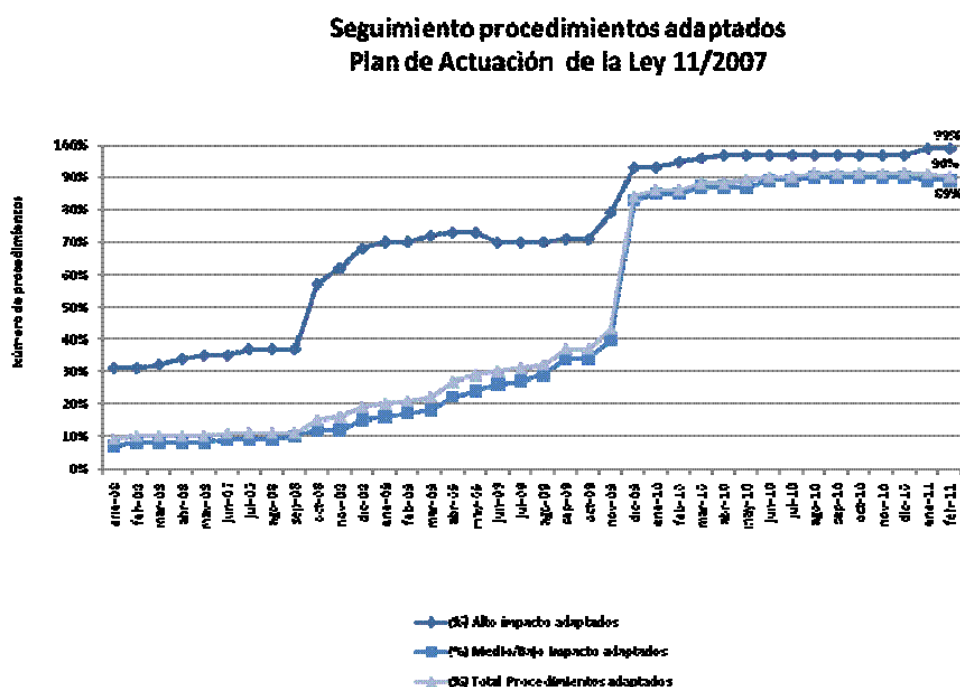
² "Informe e-España 2010":

http://fundacionorange.es/fundacionorange/analisis/eespana/e_espana10.html

The cost of implementing Act 11/2007 in the AGE

The implementation of Act 11/2007 has had a tangible result for the AGE, in the “quasi” total online availability of the services and procedures that fall within its competences. According to the most recent data provided by the Ministries and Bodies belonging to the AGE, more than 92% of these services and procedures (in other terms, over 2,300) can be processed electronically, and 99% if we limit ourselves to just the “high-impact” services and procedures. This means that 99% of the procedures that citizens and companies have with the AGE can be processed electronically.³

Graph no. 1: Evolution of the availability of e-government services through the AGE



It is difficult to provide an exact figure estimate of the financial cost of the investments that were necessary to ensure the rights of citizens provided under Act 11/2007. While the passage of the Act did result in an increase in the budgetary allocation of funds, a breakdown does not exist of how these funds were used to improve the quality of services that already complied with the law, to automate internal processes and invested in strategic plans that were carried out in parallel, such as the modernization of the Justice system. We can, however, place the **maximum cost at 268 million Euros** on the basis of the annual ITC budget report for

³ Data collected by the *Consejo Superior de Administración Electrónica*.

the AGE by the *Consejo Superior de Administración Electrónica*.⁴ This maximum figure represents the sum of the parts of the annual ITC budget investments (line 6) for 2008, 2009 and 2010 that were in excess of the same budget investment for 2007, based on the assumption (and taking into account the factors mentioned in the previous paragraph) that all of these funds were used to adapt government services and procedures to Act 11/2007.⁵ This maximum figure, which does not reflect credit reductions in each of those years, is **notably lower than the estimate given in the Financial Report that accompanied the draft bill of what would become Act 11/2007**. The implementation of E-Government in Spain has had to adapt to how the financial crisis has affected the national budget, despite the fact that it stems from a law designed during a time of economic growth.

The economic benefits to Society obtained through the implementation of Act 11/2007

The implementation of Act 11/2007 has had a double economic impact on Spanish society: on the one hand, the increase in the Public Administration's ICT budget has had **a pull effect on an industry that is key to the change in productive model**, while on the other, the segment of society that was first in exercising its rights to communicate electronically with the Public Administrations, which in large part is also the most dynamic and productive segment of the Spanish population, **experienced a reduction in administrative and bureaucratic fees**. Lastly, the automation of procedures has **clearly reduced the cost to the Public Administrations of serving the public**. Without a doubt, more services and better quality services are being provided at the same cost and using the same human resources.

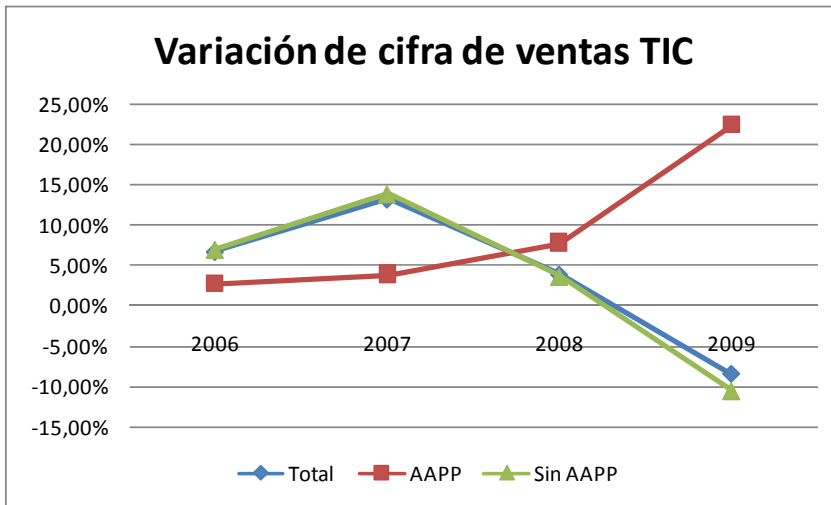
Act 11/2007 has also played a definite role in driving the change in productive model. Data from the National Telecommunications and Information Society Observatory (*ONTSI*, in its Spanish abbreviation)⁶ shows that the weight of the Public Administrations as a whole in the functional distribution of IT sector sales grew between 2007 and 2009, and for those three years was, respectively, 7.8%, 8.3% and 9.1%. Particularly significant is the increase of this weight in sales for the years 2008 and 2009, a period during which the IT business in Spain contracted by 8.5%. In that year, ICT sector sales to the Public Administrations increased by 22.31%. It is therefore not unreasonable to say that, without the investments that were made to implement Act 11/2007, 2009 would have seen a much stronger slowdown in the change in

⁴<http://administracionelectronica.gob.es/?nfpb=true&pageLabel=P60011831292932565316&langPae=es>

⁵ Line 6 was €792m in 2007, €928m in 2008 and €890m in 2009 and €826m in 2010. Thus the differentials in line 6 as compared to 2007 for the three following years were, respectively, €136m, €98m and €34m, for a total of €268m.

⁶ See the reports on the IT sector in Spain for 2008 and 2009 available at <http://www.ontsi.red.es/sector/articles/1537>

productive model that Spain needs. Consequently, the development of E-Government in Spain was essential to supporting the domestic ICT sector during those years of crisis.



Graph no. 2: Change in % of ICT sales in Spain and the Public Administration sector

The effect of the development of e-government in Spain on a reduction in administrative fees is still an on-going process within the AGE. On 20 June 2008, the Council of Ministers approved the “Plan to Reduce Administrative Fees.”⁷ The ability to reach a 30% reduction in administrative fees in 2012 depends largely on the re-engineering and automation of procedures and services needed to conform to Act 11/2007. According to the Standard Cost Model used to evaluate administrative fees and included in the Methodological Guide to drafting the Regulatory Impact Analysis Report,⁸ approved by the Council of Ministers on 11 December 2009, the financial savings on administrative fees for a single procedure when done online versus in person is 75 euros.

As stated earlier, it is still too early to estimate the full impact that the development of e-government has had on the reduction of administrative fees. Such an estimate depends on obtaining information on the use of e-government beyond the direct use of services (see graph), the number of procedures processed electronically, at present estimated at 50% for

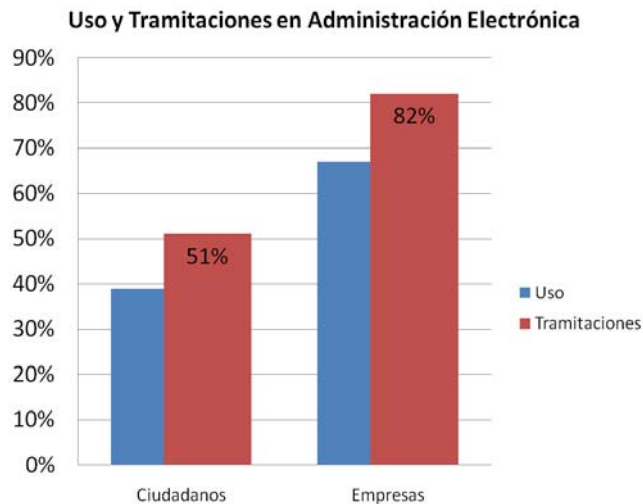
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http://www.mpt.gob.es/areas/funcion_publica/iniciativas/normativa_es/plan_accion_reduccion_cargas_advas.html “Plan de Reducción de Cargas Administrativas.”

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http://www.mpt.gob.es/areas/funcion_publica/iniciativas/impacto_normativo/parrafo/0/text_es_files/file0/guia-metodologica-ain_1264084813.pdf : “Guía Metodológica para la elaboración de la Memoria del Análisis del Impacto Normativo.”

citizens and 80% for businesses, with more than 250 million individual procedures processed electronically, and translating these figures to estimate its impact on the reduction of fees. Nevertheless, according to the aforementioned methodological guide the possible savings that could be generated by the intensive use of the 20 most important AGE online services⁹ is estimated at more than 3 billion euros.¹⁰ The impact of the automation of procedures through the implementation of e-government on the reduction of administrative fees has made it a main feature of many of the 261 actions agreed to in the five packages of measure approved since 2008. The latest of these was approved on 13 May 2011, which is expected to culminate in an overall savings on administrative fees of 9.7 billion euros.



Graph no. 3: Direct use of E-Government services (Eurostat 2010) and % of procedures processed online versus in person

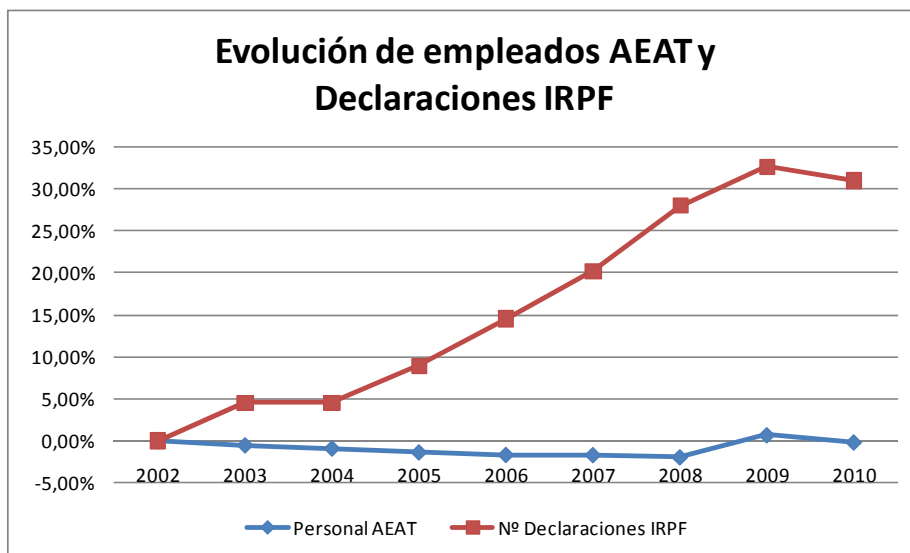
As regards the costs of public services borne by the Administrations, the data is highly dependent on each of the procedures and services and on the organization of the Public Administration providing them. In contrast to the study of the reduction in administrative fees, there is no commonly accepted methodology to calculate these costs, and an estimate of these costs to the Public Administrations in Spain likewise does not exist. Estimates made by local administrations in the UK estimate the “in-person” cost at £7.40 versus the “online” cost at £0.32, and the Danish government estimates the “in-person” cost at €10.7 versus the “online” cost at €0.40. While it is true that these two estimates indicate a similar size of the potential savings, thanks to ITCs, on what it costs Public Administrations to provide the

⁹ <http://masdestacados.060.es/>

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http://www.mpt.gob.es/prensa/intervenciones/intervenciones/01116/document_es/20110308_Comparescencia_Consuelo_Rumi.pdf

services they offer to the public, the benefits of these savings must still be determined both for Spain as for the countries within our sphere. A restructuring of Public Administrations around ITCs that would make the administrative processing of cases more flexible, independent of their point of production, and by consolidating the citizens' service offices of the various administrative bodies is one of the tasks still pending in the modernization of the administration. However, staff containment in the areas of the administration that have led the automation of administrative procedures is an indication of the effect that the introduction of ITCs has had on the cost of providing services to the public by the Public Administrations. At the State Agency for Tax Administration (or *AEAT*, in its Spanish abbreviation) the percentage increase of the parameters used to determine the volume of the Agency's activities (e.g., for personal income tax filings) has been quite large, while its staff has remained steady (a reduction of the staff by 300 is expected in 2011) and processing times and services provided are improving every year. Moreover, the automation of processes has helped absorb the impact that the growth and contraction curve of the Spanish economy has had on these parameters.¹¹ Similar behaviors can be found in other large administrations of the AGE, such as Social Security, which has seen a 10% reduction of its personnel but not a diminution the quantity or quality of the services it provides. Examples in the areas of education, industry, health, justice etc. also demonstrate the importance of this first "silent" transformation of the Spanish public administrations.

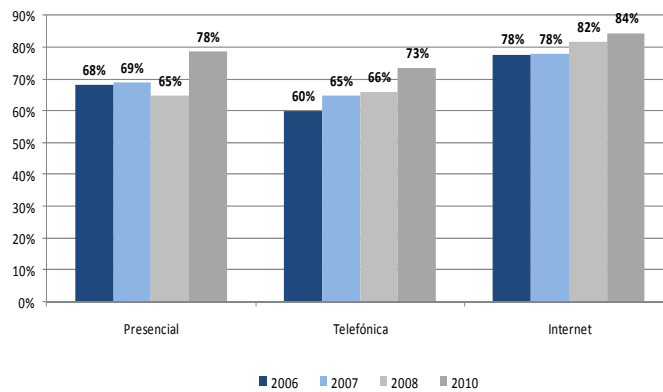


Graph no. 4: Evolution of the AEAT staff and of personal income tax filings processed by the AEAT

¹¹ Sources: "Boletín Estadístico del Personal al Servicio de las Administraciones Públicas" and the AEAT.

Indeed, not counting the extraordinary funds allocated to the Plan to Modernize the Justice System and the increase in VAT, the AGE has returned to its 2005 budget and improved the quality of public services, according to the answers provided by citizens in periodic surveys carried out by the Spanish Center for Sociological Research (or CIS, in its Spanish abbreviation), at a time when the population has grown from 40 to 47 million in a decade, and public management, which has also grown on par with this increase in population, has also seen a notable improvement in all of the parameters that measure the efficiency of the services provided.

Thanks to e-government, every year the AGE directly saves more than the additional investment it has made (archives, notices, paper, personnel, infrastructures, etc.) and citizens and companies have saved more than €10 in the reduction of administrative fees for every euro that has been invested in the implementation of Act 11/2007.



Graph no. 4: Rating of the quality of public services provided per channel (AEVAL)

The environment and the digitalization of administrative services and procedures

The implementation of **Act 11/2007** has also made a positive contribution in the fight against climate change, albeit a very modest one given the magnitude of the problem. The following table shows the equivalencies between paper consumption and automobile travel and their environmental consequences.¹²

¹² Data provided by the Department for the Environment of the Government of Aragon, and the *Fundación Ecología y Desarrollo* http://www.reciclapapel.org/htm/cambio_climatico/punto1.asp. The numbers are for blank paper, and would have to be divided approximately by half

	Equivale a	unidades
1 tonelada de papel	3,3	toneladas equivalentes de CO2
1 tonelada de papel	15	árboles talados
1 tonelada de papel	172	desplazamientos de vehículos medios diarios
1 tonelada de papel	15.000	litros de agua (15 toneladas de agua)
1 tonelada de papel	0,55	toneladas equivalentes de petróleo
1 hoja de papel A4	4,9896	gr
Paquete de 500 hojas	2,48	kg
Emisiones medias diarias por vehículo	0,32	kg CO2 / km
Desplazamiento medio diario	60	km
Emisiones por desplazamiento medio diario:	19,2	kg CO2

Given the intensive use of paper by the Administration¹³ and the equivalencies shown in the table above (or similar), the digitalization of administrative procedures and services is beginning to have a positive and easily quantifiable effect on the environment. As an example, the elimination of the paper version of the Spanish Official State Gazette has led to a savings of 4 million kilos of paper, equivalent to 57 hectares of Radiata Pine or eucalyptus, or 40,000 twelve-year-old trees and over 13,000 tons of CO2 emissions.¹⁴ Other Administrations, such as the Governments of Extremadura and Castilla-La Mancha estimate, respectively, that 1,200 and 500 trees are saved annually thanks to the elimination of the paper versions of their Official Gazettes¹⁵. The implementation of online notices, which will close the cycle of online communication with the Public Administrations, will constitute another qualitative and quantitative increase in financial savings and in improving the environment.

It would therefore be relatively easy to identify for each administrative unit the contribution it makes to slowing down climate change through the change to E-Government. To illustrate this, we will focus on the issuance of cadastral certificates, a case where abundant historical information is available, and where continuous progress in the use of the electronic channel has made the in-person channel practically unnecessary in the provision of this service.

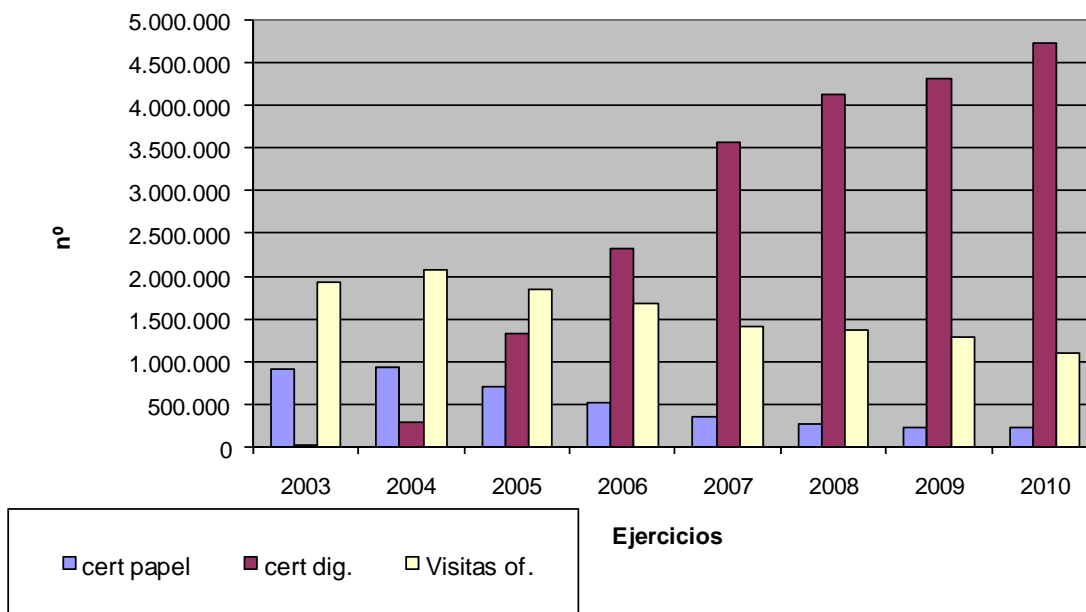
¹³ FSC España (www.es.fsc.org) estimates that this is equivalent to 18% of the paper used in Spain, valued at 2.118 billion euros. See <http://www.revistanatural.com/noticia.asp?id=1107>

¹⁴ Data provided by the Agency of the Spanish Official State Gazette on paper consumption in 2008, the last year that the Gazette appeared in paper. In that year, the printing of 12,000 issues per day, markedly lower than the 40,000 issues per day printed in 2000 and before the Gazette services were being fully developed for the Internet.

¹⁵

http://www.elpais.com/articulo/portada/2008/fin/BOE/papel/elpeputecib/20080103elpeputecibpor_2/Tes

Visitas oficinas / Certificados catastrales en papel/ certif. en Sede



Graph no. 1: Paper vs. Digital cadastral certificates from 2003 to 2010 (D.G. Catastro)

Even if the person receiving the certificate makes a paper copy of the electronic document, the savings alone on the elimination of the paper request for the certificate is equal to 14 million DinA-4 sheets of paper¹⁶ in just two years, or over 69 tons of paper. As a result, 1035 trees and over 227 tons of CO2 emissions have been saved, in addition to the more important savings on millions of trips that individuals would have to make to process this document in person.

Conclusion

The AGE's adaptation to the provisions of **Act 11/2007** constitutes an **unprecedented advance towards the digitalization of process in our society** that would not have been possible without the efforts of the Administration's ITC specialists. This paper is an attempt to make an initial estimate of the cost of this adaptation and of its economic and environmental impact. The investments that were necessary to reach the current state of implementation of E-

¹⁶ Based on the estimation that for each process carried out in person, three DINA-4 sheets were used: one for the application, another for its duplicate copy and a third for the certificate itself.

Government, albeit limited to the period 2008-2010, have been substantial. However, **these investments are beginning to bear fruit**, and have converted E-Government into an engine of sustainability for Society and the Administration that will make it possible not only to maintain, but also to improve the quality of public services in the next decade, marked by budget containment and low turnover in public employment.

A realization of this fact, which is very good for the country and has initiated a transformation of the public administrations, should not lead us into the pitfalls of triumphalism. Efforts to see this process happen in the local administrations that have seen their budgets drastically reduced by the crisis, optimizing the cost of the AGE's IT resources as a whole without jeopardizing what has already been achieved, and encouraging the massive use by citizens and companies of the services that have been implemented (savings are obtained from the direct or indirect use of these services, not simply their availability) are just some of the current objectives, which in any event will require the **last great transformation we must face: the change in mentality of the administration and society.**

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http://www.astic.es/sites/default/files/articulosboletic/tecnologdega_1_administracion_electrnica_en_espasa.pdf