



Good Governance for Digital Policies: How to Get the Most Out of ICT

THE CASE OF SPAIN'S PLAN AVANZA



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Foreword

OECD economies increasingly depend on digital knowledge and information to stay ahead in the global economy. Countries that are good at creating, diffusing and exploiting information for economic gain often find themselves at the forefront of new market opportunities and sources of growth. Underpinned by Information and Communication Technologies (ICTs), these knowledge economies are growing more productive, innovative, and sustainable.

The economic crisis has further propelled the use of ICTs, which are regarded as agents of economic growth and as catalysts for structural economic change. Plan Avanza, Spain's national strategy for the advancement of the Information Society, is a concerted policy response to the role played by ICTs in achieving the dual dividend of economic recovery and long-term growth. At a time of growing fiscal constraints and when the cost-effectiveness of policies is under close scrutiny, getting the most out of ICTs is of paramount importance to ensure an efficient use of public resources.

In addition to assessing the results of Plan Avanza, this Review analyses the Plan's governance mechanisms, including the institutional and public management tools that are the driving forces behind its various programmes. A strong information society also requires a supportive legal and regulatory framework, and Plan Avanza has helped to promote key pieces of legislation that have encouraged digital inclusion and the creation of digital public services.

The insights provided in the report are particularly useful as they come at a time when Spain is preparing to launch Plan Avanza 2 (2010-2015). To further maximize its impact, this new phase would benefit from further exploitation of ICTs' transformative potential, a greater balance between supply and demand-side policies, and improved alignment of policy instruments to improve cost-effectiveness.

This Review is the result of multidisciplinary and cross-sectoral analysis. It is a strong reminder that governments in all countries need a good understanding of governance, technology and regulatory policies as inter-dependent forces driving the Information Society.

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Acronyms and key terms

Broadband	There is no standard definition of the threshold speed for broadband. In this report, depending on the source, different thresholds may apply. For instance, the European Commission’s Communications Committee (COCOM) and EuroStat define broadband as telecommunication lines or connections are defined as those transporting data at high speeds, with a speed of data transfer for uploading and downloading data (also called capacity) equal to or higher than 144 kbit/s. The technologies most widely used for broadband access to the Internet are digital subscriber lines (DSL or xDSL) or cable modems. On the other hand, ITU’s broadband indicator is called “Total fixed (wideband and) broadband Internet subscribers” and defined at speeds equal to, or greater than 256 kbit/s, in one or both directions.
CATSI	<i>Consejo Asesor de Telecomunicaciones y la Sociedad de la Información.</i> The consultative body that helps set Plan Avanza’s high-level priorities and objectives. CATSI consists of representatives from government, regions and municipalities, ICT/user associations, etc., organised into several working groups.
Digital divide	The term "digital divide" refers to the gap between individuals, households, businesses and geographic areas at different socio-economic levels with regard to both their opportunities to access information and communication technologies (ICTs) and to their use of the Internet for a wide variety of activities. The digital divide reflects various differences among and within countries.
DLR	Digital learning resources. This report broadly defines DLR as any digital resources actually used by teachers and learners for the purpose of learning. The term refers not only to learning resources that have been designed from the very outset as digital materials, but also other resources that have been digitised. It covers resources produced by commercial publishers, governments or public agencies, such as public broadcasting companies or libraries.
E-government	The term “e-government” focuses on the use of new information and communication technologies (ICTs) by governments as applied to the full range of government functions. In particular, the networking functionalities offered by the Internet and related technologies have the potential to transform the structures and operation of government.

Electronic commerce	Electronic commerce refers to commercial transactions occurring over open networks, such as the Internet. Both business-to-business and business-to-consumer transactions are included.
E-prescribing	There is no internationally agreed-upon definition for e-prescribing. However this report refers to this term as: the electronic transfer of a prescription to a dispensing pharmacist/pharmacy.
EHR	Electronic health record. An electronic record of health-related information on an individual that conforms to nationally recognized interoperability standards and that can be created, managed, and consulted by authorized clinicians and staff across more than one health care organization.
End-users	The targeted beneficiaries of a policy. For instance, in a programme designed to extend broadband to schools, the end-users would include educators, education administrators, students, parents, etc. In a programme designed to promote the design of websites in small and medium-sized enterprises (SMEs), the end-users of such a programme would be the SMEs.
ICTs	Information and communication technologies. ICT technologies are intended either to fulfil the function of information processing and communication by electronic means, including transmission and display, or to use electronic processing to detect, measure and/or record physical phenomena, or to control a physical process.
INE	<i>Instituto Nacional de Estadística</i> . Spain's National Statistics Office.
Internet	A global system of linked computer networks that allows data communication services such as remote log in, file transfer, electronic mail, bulletin boards and news groups. The Internet is also the foundation for the World Wide Web (WWW).
IS	Information society. Synonymous with what is meant by "new ICT". Since the beginning of the 1990s, new ICT have been booming. The universal use of electronic exchanges of information, convergence towards digital technologies, the exponential growth of the Internet and the opening up of telecommunications markets are all signs of this change. The OECD's Guide to Measuring the Information Society, sets forth, in statistical terms, some of the main components which encompass the widely agreed elements of ICT supply, ICT demand, ICT infrastructure, ICT products and 'content'.
IS strategies	Information society strategies/policies. Over the years, a growing number of OECD member countries have been widening the scope of their information and communication technology (ICT) policies to encompass wider social and economic dimensions. These objectives now include promoting sustainable economic growth, boosting productivity, providing employment opportunities, encouraging

innovation, and improving the effectiveness of public services and citizens' quality of life. In short, many ICT policies have become information society (IS) strategies. These strategies are largely horizontal, working across policy areas/sectors of government to achieve their aims.

- MITT *Ministerio de Industria, Turismo y Comercio*. Spain's Ministry of Industry, Tourism and Trade. The central government organisation responsible for leading IS and telecommunications policy.
- ONTSI *Observatorio Nacional de Telecomunicaciones y la Sociedad de la Información*. Spain's National Observatory for Telecommunications and the Information Society, an organisation within the STIS responsible for measuring, collecting, analysing and distributing information (data, statistics, methodologies, etc.) on IS policy in Spain and abroad.
- SMEs Small and medium-sized enterprises. Non-subsidiary, independent firms employing less than a given number of employees. The most frequent upper limit designating an SME is 250 employees, as in the European Union. However, some countries set the limit at 200 employees, while the United States considers SMEs to include firms with fewer than 500 employees. Small firms are generally those with fewer than 50 employees, while micro-enterprises have at most 10, or in some cases 5, workers. The report utilises the European Union's definition. Financial assets are also used to define SMEs. In the European Union, a new definition came into force on 1 January 2005 applying to all community acts and funding programmes as well as in the field of state aid where SMEs can be granted higher intensity of national and regional aid than large companies. The new definition provides for an increase in the financial ceilings: the turnover of medium-sized enterprises (50-249 employees) should not exceed EUR 50 million; that of small enterprises (10-49 employees) should not exceed EUR 10 million while that of micro firms (less than 10 employees) should not exceed EUR 2 million. Alternatively, balance sheets for medium, small and micro enterprises should not exceed EUR 43 million, EUR 10 million and EUR 2 million, respectively.
- STIS *Secretaría de Estado de Telecomunicaciones y para la Sociedad de la Información*. Secretariat of Telecommunications and the Information Society. Organisation within the MITT responsible for leading and implementing Plan Avanza projects in Spain.

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Core messages of the review

Some of the key achievements made under Plan Avanza in information and communications technology (ICT) diffusion and public sector modernisation are highlighted in this peer review. Additionally, the review identifies areas on which future work could focus in order to sustain – and magnify – the important progress made thus far. In particular, the government of Spain could **consider prioritising the following three lines of action**, aimed at strengthening the role, responsiveness and performance of information society (IS) policy in Spain:

Plan Avanza as a strong contributor to economic recovery and long-term objectives for green growth and innovation.

- Given the potential of ICTs and the ICT sector to contribute to societal and economic-wide goals for greater growth, innovation, sustainability, equity, and citizens' welfare – the strategy could better reinforce cross-sectoral synergies and existing partnerships to **contribute more strongly to the country's policy agenda for economic recovery and long-term objectives for structural reform**. The current macroeconomic and political climate in Spain is ripe for Plan Avanza to consolidate itself as a key policy agenda for achieving this “dual-dividend”, and policy makers should seize this opportunity to utilise ICTs' transformative power to create greater public and economic value.
- Towards this end, Plan Avanza policy makers should consider **broadening their efforts to support a “whole-of-government” approach to green growth and innovation** by more proactively exploiting synergies with other relevant policy domains. Specifically, closer co-operation at the ministerial level is needed to promote innovation in SMEs and increase energy efficiency by scaling-up efforts to develop and roll-out “green ICTs” for use in “smart-grids”, buildings, transport and throughout the entire economy. Likewise, **developing and implementing targeted IS policies for groups and sectors particularly affected by the crisis** will be important for the strategy at this critical juncture. As a horizontal sector and catalyst for systemic innovation, helping the Spanish ICT sector **grasp potential market opportunities – at home and abroad –** will be key.

Plan Avanza as a demand-driven, user-centred strategy that delivers visible results to society.

- Much of the progress made since the launch of Plan Avanza has been in terms of increasing the availability of essential ICT infrastructure upon which continued development relies. However, leveraging the investments made thus far will depend on reaching a greater equilibrium between supply and demand-side policies in order to maximise the value of these infrastructures for the economy and to enhance benefits for society.

Core messages of the review *(continued)*

- The government of Spain should consider **scaling-up efforts to further develop ICT skills**, not only in terms of basic skills in the general population but also specific ICT-enabled competencies in particular groups (civil servants, managers, unemployed people and entrepreneurs, among others). Furthermore, Plan Avanza should **re-orient its communications strategy** to support ongoing e-government marketing strategies to promote take-up and **support a movement towards more demand-driven public services**, such as in the health sector for example. Finally, future IS strategies in Spain could further increase their cost-effectiveness by shifting from broad-based ICT diffusion policies to **more precise, targeted infrastructure investments**, reflecting some remaining digital divides in certain socio-economic/demographic groups, territories or sectors.

Plan Avanza as a high-performing policy that maximises impact and makes optimal use of resources.

- An effective governance framework has been created for the design and implementation of the plan but more could be done to optimise resources and maximise the impacts, especially in times of fiscal tightening.
- For example, at the sub-national level, the **plan could create a roadmap for municipalities and promote horizontal co-ordination** amongst sub-national governments to maximise economies of scale and attain greater buy-in. The State Secretariat for Telecommunications and the Information Society (SSTIS) could also consider **co-developing a change management strategy** with regional governments to further secure the sustainability of investments. At the national level, **the distribution formula of Plan Avanza funds could be revisited** to more strongly contribute to closing digital divides, and the Plan's **monitoring and evaluation framework could be improved** by increasing oversight over programmes implemented by external stakeholders, standardising programme indicators across regions, and reinforcing linkages between existing input and output data with analyses aimed at evaluating cost-effectiveness and guiding policy decisions.

Assessments and proposals for action

Plan Avanza (“the Plan”) has arguably been Spain’s most comprehensive policy to date aimed at furthering the development of the country’s information society, a significant accomplishment in and of itself when considering the challenges involved in launching a new initiative of such a large, cross-sectoral scope and complexity. Whereas previous information society (IS) policies were implemented in isolation by different ministries, under Plan Avanza there has been greater policy coherence in terms of sequencing and responding to national and sub-national priorities. Streamlining and scaling-up these policies under the Plan, as well as increasing co-ordination with regional and local governments, has yielded important results: under the auspices of Plan Avanza, Spain’s information society is approaching an important turning point wherein the progress made in ICT diffusion has reached a threshold of critical mass. Indeed, the principal challenge for policy makers now is to bridge these technologies with their intended purposes – productivity gains, facilitating innovation, increasing growth and public sector efficiency, and generating benefits for citizens.

Nearly five years after its initial launch in 2006, and at the request of the Spanish government, this report examines some of the key advancements made recently in integrating citizens, businesses and the public administration into the information society, and identifies areas on which future work could focus in order for Spain to continue converging with EU and OECD member countries and – in some areas – position itself amongst leaders in ICT access and usage, in the growth of the ICT sector and in the development of e-government services. Second, with a view to helping Spain improve the cost-effectiveness and efficiency of Plan Avanza’s policies, the review examines the strategy’s governance framework, recognising the importance of institutional and implementation mechanisms as key factors. Certainly, experiences from other OECD member countries suggest that the success of IS strategies often depends on taking into consideration a number of the governance factors which will be examined in this report: developing a coherent, cross-sectoral policy portfolio; strategic priority-setting and policy sequencing; ensuring the involvement of critical stake-holders; adequate funding and incentive structures between and across levels of government; adapting regulatory and legislative frameworks to support objectives; and applying strong evaluation and oversight measures.

Insights gained from the peer review exercise are particularly relevant at this time, as the information society policy agenda finds itself at a critical juncture in Spain. The EU’s Digital Agenda was released this year and the next Spanish IS strategy (Plan Avanza 2) will be implemented in parallel, with the advantage of building on achievements and learning from the strengths and weaknesses of its predecessor. Moreover, lessons learnt from the review become more imperative for Spain and other OECD member countries, as future IS strategies enter into force in the midst of a complex political, social and economic context which, though not unique to Spain, will no doubt influence the next strategy in the short term. For recommendations to be both valuable and implementable, it is important to recognise how these current issues and trends will play a role in dictating

the next strategy's objectives, priorities and governance approach. These issues present both important challenges and opportunities and include:

- **Ongoing economic recovery:** OECD member countries are now on the path to recovery from one of the most severe global financial turned economic recessions experienced in decades. In this context of still uncertain growth rates and volatility, policy makers and citizens judge large-scale policies and investments on their capacity to contribute to objectives for growth and the creation of employment opportunities. In the short- to medium-term, policies – including the information society agenda – must be able to demonstrate that they are contributing positively to these important goals.
- **Growing prevalence of ICTs:** while ICTs certainly have a role in contributing to recovery from the crisis, at the same time, an additional challenge for OECD member countries is maintaining a long-term vision of how the transformative power of these technologies can be used to contribute to objectives for structural reform. OECD member countries are entering an era where ICTs are by and large considered general purpose technologies: technologies which have become irrevocably embedded in peoples' daily lives, in business operations, and in the ways governments interact with citizens and deliver services. As ubiquitous technologies, governments cannot afford to omit ICTs from their decisions and policies for innovation, growth and inclusion, or they risk being left unable to compete in a global economy that increasingly relies on knowledge-based transactions facilitated by technology.
- **Increasing fiscal constraints:** the crisis has also exacerbated levels of sovereign debt, to the point where in 2010 the OECD fiscal deficit is projected to stabilise at 7.8% of GDP (OECD, 2010a). As a result, policy makers (including regional and local governments) are under growing pressure to maximise results in times of recovery while also optimising resources. As key contributors to growth, information society strategies operating in a more stringent fiscal environment will need to find innovative solutions to deliver stronger results and increase cost-effectiveness.
- **High expectations of citizens:** finally, in the current macroeconomic and political climate, governments are also under pressure to enhance tangible results for citizens with perceivable effects on their welfare and lives. In the wake of the crisis, after tax payers have financed stimulus packages and contributed to cushion against public sector default, there is a growing demand from the electorate for government investments and initiatives to translate into direct benefits for end-users and deliver greater public value (OECD, 2009a).

The severity of the last recession and immediacy of the (above) issues for citizens signify that any current ambitious, large-scale policy operating at this time must be able to adapt to this current context, demonstrating that it is **responsive to needs, contributing value to society and that it uses its resources efficiently**. The following section highlights the review's key findings and main conclusions, setting out proposed areas of action that the government of Spain – in the context of the aforementioned trends and contributing to long-term goals – could consider implementing under the next IS strategy. The proposed areas of action can be summed up under the following three pillars.