

# INFORMATION AND COMMUNICATION TECHNOLOGIES IN THE STATE ADMINISTRATION

REINA report 2015

Executive summary



GOBIERNO  
DE ESPAÑA

MINISTERIO  
DE HACIENDA  
Y ADMINISTRACIONES PÚBLICAS

SECRETARÍA DE ESTADO DE  
ADMINISTRACIONES PÚBLICAS

DIRECCIÓN DE TECNOLOGÍAS DE LA  
INFORMACIÓN Y LAS COMUNICACIONES

**TITLE:** Information and Communication Technologies in the State Administration. REINA report 2015.  
Executive summary

Coordination and content development: Directorate for Information Technologies and Communications  
Dirección de Tecnologías de la Información y las Comunicaciones (DTIC)

**September, 2015**

Digital edition with: Adobe Acrobat 5.0

Available online at Portal de Administración Electrónica (PAe):  
<http://administracionelectronica.gob.es/>

**Published:**

© Ministry of Finance and Public Administration  
Technical Secretariat-General  
Information, Documentation and Publications Unit  
Publications Centre

**Edita:**

© Ministerio de Hacienda y Administraciones Públicas  
Secretaría General Técnica  
Subdirección General de Información,  
Documentación y Publicaciones  
Centro de Publicaciones

Publisher's series: administración electrónica

**NIPO:** 630-15-251-6



This document is licensed under a Creative Commons International Attribution-ShareAlike licence 4.0 Spain.

You are free to:

- Share — copy and redistribute the material in any medium or format
  - Adapt — remix, transform, and build upon the material for any purpose, even commercially.
- The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following terms:

**Attribution** — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

**ShareAlike** — If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original.

**No additional restrictions** — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.

This is a human-readable summary of (and not a substitute for) the licence. The full legal text is available at:  
<https://creativecommons.org/licenses/by-sa/4.0/legalcode>

## CONTENTS

|   | <b>Page</b> |
|---|-------------|
| INTRODUCTION.....                           | 5           |
| ICT EXPENDITURE.....                        | 6           |
| IT EQUIPMENT .....                          | 9           |
| SOFTWARE .....                              | 11          |
| ICT STAFF.....                              | 11          |
| NETWORKS IN THE PUBLIC ADMINISTRATION ..... | 13          |



## INTRODUCTION

Royal Decree 806/2014, of 26 September, introduced amendments and established the ICT Strategy Committee. Among the Committee's functions is 'acting as an Observatory of E-Government and Digital Transformation. In order to perform this task, the ICT Strategy Committee collects 'information on the technology, human, economic and procurement resources in information technologies' and publishes regular reports on the results of its surveys on the E-Government Portal (PAe, after name in Spanish).

In compliance with this, we are introducing a new REINA Report, analysing the most representative indicators of the situation and use of information and communication technologies and systems in State Administration as at 1 January 2015.

The report covers the following:

- Central, territorial and foreign organisations in the General Administration.
- Self-governing bodies reporting to ministry departments.
- Social Security common services and management agencies.
- State agencies.
- State-owned corporations and other public bodies: Administrator of Railway Infrastructures (ADIF), Spanish Airports and Air Navigation (AENA), Spanish Data Protection Agency, National Tax Agency, Centre for Industrial and Technology Development (CDTI), National Stock Exchange Commission (CNMV), Nuclear Security Council, Insurance Compensation Consortium, Spanish Mint, Instituto Cervantes, El Prado Museum, Reina Sofía Museum, National Ports and Port Authority, State-owned Industrial Ownership Corporation (SEPI).

The information about Social Security common services and management agencies, State agencies, state-owned business organisations and other bodies is grouped under the ministry these agencies and organisations report or are related to, according to the organisational structure in force as at 1 January 2015.

The information about Security Forces and law enforcement bodies, Armed Forces and the Judiciary is grouped under Home Affairs, Defence and Justice, respectively.

## ICT EXPENDITURE

In 2014, ICT expenditure in the General Administration amounted to €1,421 million, a total similar to 2013 and 2.2% lower than 2012. The telecommunications budget went down by 7.05% over 2013, with a total share of about 23%. As to the IT expenditure, it rose by 2.3%. Almost 60% expenditure corresponded to three ministries: the Ministry of Home Affairs, the Ministry of Employment and Social Security, and the Ministry of Finance and Public Administration.

Reviewing the expenditure structure broken down by departments, telecommunications accounted for a high share of the total in the Ministries of Home Affairs, and Employment and Social Security – 55% and 11%, respectively.

The indicator reflecting the ICT expenditure share in the total budget (chapters 1, 2, 6) was 3.63%, 0.20% less than in 2013 and similar to the share in 2010.

The distribution of ICT expenditure by procurement methods was similar to the one reported the previous year, with a higher global share for procurement through negotiated procedures (from 24% to 28%) and a smaller global share for open procedures (from 35% to 31%).

IT expenditure was higher, but the distribution changed, with higher allocation for hardware (15% vis-à-vis 11%) and lower shares for both IT services (43% vis-à-vis 45%) and staff (from 31% to 28%).

Out of the whole IT expenditure (€1,105 million), 43% corresponded to IT services (application development and maintenance, hardware and software maintenance, consulting services, operation, training, and so on). This was a smaller share than in 2013.

Expenditure on staff accounted for 28% of the total budget. Hardware costs rose to 15%, including investments and equipment rental, even when the latter does not amount to much in the General Administration.

**Software** costs (procurement of systems and application packages, without custom developments) rose to 12% of total expenditure.

Broken down by ministries/departments, Finance and Public Administration, and Home Affairs had the largest shares in hardware (35% and 18%, respectively), while the software share for the former was 30%. Likewise, the Ministry of Finance and Public Administration accounted for 18% of the expenditure in IT services. Finally, Finance and Public Administration, and Home Affairs were the ministries with the largest shares in ICT staff (25% and 22%, respectively).

Hewlett-Packard continued to be the leading hardware supplier, with 21% share, while IBM kept its place as the main software supplier (37%) and Indra retained its position as the most important supplier of IT services (9%) in a highly fragmented market.

With a 37% share, IBM continued to be the main software supplier. No other supplier went beyond 10%.

The total **hardware** investment totalled almost €159 million, 39% more than in the previous year (€113 million). 53% of the total budget went to the procurement of devices, 27% was channelled into personal computers and 20% was used to buy multi-user systems.

Information management systems accounted for 17% of the total investment in software, while 7% went to horizontal applications.

The total expenditure in IT services in 2014 amounted to €476 million, 2.75% less than in 2013.

Regarding **telecommunication services**, the total expenditure was €316 million (-10%).

The largest supplier of telecommunication services was Grupo Telefónica, whose share, 82%, was 1% lower than in 2013. It was followed by BT España and other operators, whose share was 8%. The rest of the suppliers had shares of less than 1%.

## IT expenditure

01/01/2015

| Ministry                             | IT expenditure |                |                |                |               | Telecommunications expenses | Total            |             |
|--------------------------------------|----------------|----------------|----------------|----------------|---------------|-----------------------------|------------------|-------------|
|                                      | Hardware       | Software       | IT services    | Staff          | Others        |                             | €                | %V          |
| Home Affairs                         | 29,885         | 40,188         | 85,222         | 76,051         | 4,659         | 172,788                     | 408,793          | 28.75%      |
| Finance and Public Administration    | 57,743         | 15,067         | 72,445         | 66,923         | 4,358         | 25,684                      | 242,220          | 17.03%      |
| Employment and Social Security       | 19,813         | 37,701         | 80,308         | 44,091         | 4,135         | 34,065                      | 220,113          | 15.48%      |
| Defence                              | 11,207         | 5,492          | 30,210         | 58,883         | 1,407         | 14,839                      | 122,038          | 8.58%       |
| Economy and Competitiveness          | 14,453         | 14,589         | 37,667         | 15,273         | 2,001         | 6,737                       | 90,720           | 6.38%       |
| Development                          | 2,084          | 2,500          | 39,177         | 9,216          | 1,313         | 20,253                      | 74,543           | 5.24%       |
| Justice                              | 6,133          | 9,097          | 25,229         | 5,869          | 1,214         | 8,689                       | 56,231           | 3.95%       |
| Agriculture, Food and Environment    | 3,412          | 2,483          | 30,876         | 3,014          | 1,103         | 9,238                       | 50,126           | 3.52%       |
| Health, Social Services and Equality | 5,692          | 3,947          | 21,602         | 7,293          | 937           | 4,050                       | 43,521           | 3.06%       |
| Foreign Affairs and Cooperation      | 3,547          | 2,274          | 18,120         | 7,464          | 718           | 13,726                      | 45,849           | 3.22%       |
| Education, Culture and Sports        | 2,677          | 806            | 19,312         | 2,165          | 684           | 2,107                       | 27,751           | 1.95%       |
| Industry, Energy and Tourism         | 4,422          | 2,324          | 12,099         | 4,429          | 565           | 2,500                       | 26,339           | 1.85%       |
| Presidency                           | 2,174          | 921            | 3,653          | 4,825          | 202           | 1,525                       | 13,300           | 0.99%       |
| <b>Total</b>                         | <b>163,243</b> | <b>137,390</b> | <b>475,918</b> | <b>305,495</b> | <b>23,297</b> | <b>316,202</b>              | <b>1,421,545</b> | <b>100%</b> |

%V: Vertical percentage



## IT EQUIPMENT

As at 1 January 2015, the total number of equipments installed in the General Administration was 525,551, with an average age of 5.2 years.

### IT equipment

01/01/2015

|                    | Number (systems) | Age (years) |
|--------------------|------------------|-------------|
| Mainframes         | 47               | 6.2         |
| Servers            | 24,580           | 6.1         |
| Personal computers | 500,924          | 5.1         |
| <b>Total</b>       | <b>525,551</b>   | <b>5.2</b>  |

As in 2013, the Ministry of Defence had the highest number: 23% of the total IT equipment installed in the General Administration. It was followed by the Ministry of Home Affairs, the Ministry of Finance and Public Administration and the Ministry of Employment and Social Security.

In terms of type of systems, almost 60% large systems were to be found in the Ministry of Employment and Social Security and the Ministry of Home Affairs. 24% servers were in the Ministry of Employment and Social Security, whereas 23% personal computers belonged to the Ministry of Defence.

The table below shows the distribution of personal computers by type. The global number of personal computers increased by 7%. 85% were desktop computers, while 11% were laptops and 4%, mobile devices.

Almost 28% laptops were in the Ministry of Finance, while the distribution of desktop computers was similar to that of total systems. 28% mobile devices were in the Ministry of Home Affairs.

## Equipment by ministries

01/01/2015

| Ministry                             | Mainframes |             | Servers       |             | Personal computers |             | Total          |             |
|--------------------------------------|------------|-------------|---------------|-------------|--------------------|-------------|----------------|-------------|
|                                      | Number     | %V          | Number        | %V          | Number             | %V          | Number         | %V          |
| Defence                              | 4          | 9%          | 3,502         | 14%         | 115,406            | 23%         | 118,912        | 23%         |
| Home Affairs                         | 12         | 26%         | 1,722         | 7%          | 85,942             | 17%         | 87,676         | 17%         |
| Finance and Public Administration    | 3          | 6%          | 2,809         | 11%         | 76,398             | 15%         | 79,210         | 15%         |
| Employment and Social Security       | 14         | 30%         | 5,881         | 24%         | 58,757             | 12%         | 64,652         | 12%         |
| Economy and Competitiveness          | 3          | 6%          | 3,574         | 15%         | 50,763             | 10%         | 54,340         | 10%         |
| Development                          | 6          | 13%         | 2,219         | 9%          | 29,218             | 6%          | 31,443         | 6%          |
| Justice                              |            |             | 911           | 4%          | 20,020             | 4%          | 20,931         | 4%          |
| Foreign Affairs and Cooperation      |            |             | 947           | 4%          | 16,130             | 3%          | 17,077         | 3%          |
| Agriculture, Food and Environment    | 5          | 11%         | 731           | 3%          | 15,114             | 3%          | 15,850         | 3%          |
| Education, Culture and Sports        |            |             | 876           | 4%          | 11,531             | 2%          | 12,407         | 2%          |
| Health, Social Services and Equality |            |             | 608           | 2%          | 9,384              | 2%          | 9,992          | 2%          |
| Industry, Energy and Tourism         |            |             | 599           | 2%          | 9,097              | 2%          | 9,696          | 2%          |
| Presidency                           |            |             | 201           | 1%          | 3,164              | 1%          | 3,365          | 1%          |
| <b>Total</b>                         | <b>47</b>  | <b>100%</b> | <b>24,580</b> | <b>100%</b> | <b>500,924</b>     | <b>100%</b> | <b>525,551</b> | <b>100%</b> |

%V: Vertical percentage

%V.: Vertical percentage

## SOFTWARE

Analysis of the operating systems installed in 2014, broken down by IT equipment segments.

43% new mainframes ran on UNIX; another 43% have Linux as their operating system.

24% servers installed in 2014 had Windows Server 2008, vis-à-vis 27% in 2013. 26% servers ran on Linux.

Finally, almost 95% personal computers installed in 2014 had Windows as their operating system, the most common versions being Windows 7 (56%), Windows 8 (38%) and Windows XP (4%).

## ICT STAFF

The global number of employees doing ICT-related tasks in the General Administration was 10,725. 95% of them were career civil servants, while the remaining 5% were non-civil-service workers.

23% worked in the Ministry of Finance and Public Administration and another 23%, in the Ministry of Home Affairs, followed by the Ministry of Defence (19%). The staff share for each of the other ministries was less than 16%.

Almost 58% non-civil-service employees worked in the Ministries of Finance and Public Administration, Defence, Employment and Social Security, and Economy and Competitiveness.

Analysing staff structure by ministries/departments, career civil servants accounted for significant shares in most of them. Only in the Ministry of Education, Culture and Sports was the share of non-civil-service workers as high as 21%.

## Personal TIC / Personal total

### ICT/total staff ratio

01/01/2015

| Ministry                             | ICT staff     | Total staff(*) | ICT/total staff ratio |
|--------------------------------------|---------------|----------------|-----------------------|
| Finance and Public Administration    | 2,485         | 47,037         | 5.28%                 |
| Presidency                           | 163           | 3,245          | 5.02%                 |
| Employment and Social Security       | 1,574         | 43,630         | 3.61%                 |
| Agriculture, Food and Environment    | 273           | 10,097         | 2.70%                 |
| Economy and Competitiveness          | 592           | 23,451         | 2.52%                 |
| Foreign Affairs and Cooperation      | 164           | 7,354          | 2.23%                 |
| Industry, Energy and Tourism         | 70            | 3,151          | 2.22%                 |
| Education, Culture and Sports        | 268           | 13,550         | 1.98%                 |
| Health, Social Services and Equality | 106           | 6,522          | 1.63%                 |
| Defence                              | 2,051         | 142,015        | 1.44%                 |
| Home Affairs                         | 2,424         | 179,768        | 1.35%                 |
| Justice                              | 327           | 26,965         | 1.21%                 |
| Development                          | 228           | 29,452         | 0.77%                 |
| <b>Total</b>                         | <b>10,725</b> | <b>536,237</b> | <b>2.00%</b>          |

(1) Staff not working with general network not included.

(2) Staff numbers are from 01/07/2014. At the time of writing this report, the Public Administration Staff Statistics Newsletter as at 01/01/2015 had not been published. The figures published in the Newsletter appear in this report without the numbers corresponding to state-owned business organisations and other bodies.

## NETWORKS IN THE PUBLIC ADMINISTRATION

As at 1 January 2015, there were 93 computers every 100 public servants on average in the General Administration as a whole, a ratio higher than that of the past two years.

In the case of administrative workers (excluding security forces, teachers and health professionals), the number rose to 187 computers every 100 public servants.

86% computers were connected to the Intranet, 4% less than in 2013. As to PCs connected to the Internet, their number also fell slightly to 83% (-3%).

The number of computers with Internet access every 100 public servants was 77. If only administrative workers are taken into account (excluding security forces, teachers and health professionals), the ratio was much higher: 157.

As to computers with access to the Intranet, the ratio was 81/100 or +5% as compared to the past report, in line with the trend seen in the past years. Taking into account administrative workers only (excluding security forces, teachers and health professionals), this ratio rose to 163.

The total number of public servants who had an e-signature was 337,823, i.e. 63% of all workers and +7% vis-à-vis 2013.

42.6% of public servants with an e-signature worked in the Ministry of Home Affairs, where this technology was quite widespread among police and civil guard forces.