



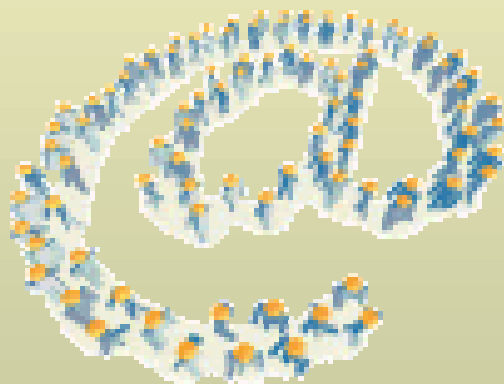
MINISTERIO  
DE ADMINISTRACIONES  
PÚBLICAS

SECRETARÍA DE ESTADO  
PARA LA ADMINISTRACIÓN  
PÚBLICA

CONSEJO  
SUPERIOR DE  
INFORMÁTICA

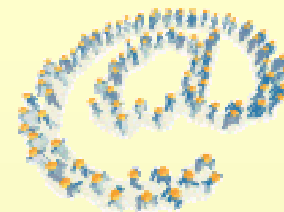
## Seminar 2:

# E-GOVERNMENT IMPLEMENTATION



GLORIA NISTAL  
HEAD OF SECTOR OF COOPERATION ON ICT  
COUNCIL OF ICT  
[gloria.nistal@sgci.dgopti.map.es](mailto:gloria.nistal@sgci.dgopti.map.es)  
[gnistal@tsai.es](mailto:gnistal@tsai.es)

Napoli, 12 - 14 March 2001



# E-GOVERNMENT IMPLEMENTATION

## INDEX

### **First Session (9h30'-11h) Gloria Nistal**

#### **1. OVERVIEW**

#### **2. THE RESOURCES**

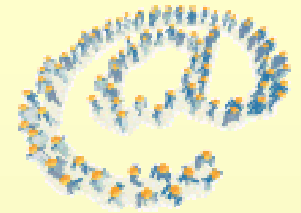
#### **3. THE TECHNOLOGY AND THE STANDARDS**

#### **4. MAIN SERVICES**

#### **5. HOW TO IMPLEMENT EGOVERNMENT**

### **Coffee Break (11h-11h.30')**

### **Second Session (11h30'-13h) Colm Butler**



# E-GOVERNMENT IMPLEMENTATION

## 1. OVERVIEW

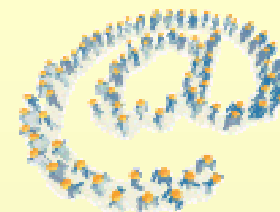
 A Definition

 A Challenge

 Why e-Government?

 The Risks: Barriers and Recommendations

 The Key Ideas



## IMPLEMENTING EGOVERNMENT

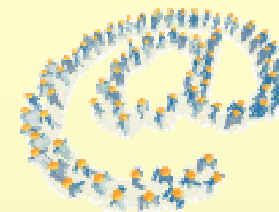
### 1. OVERVIEW. A DEFINITION

- ✉ A new way of Public Management, based on intensive use of ICT, to deliver better services for citizens and businesses, and to get a greater integration of the services rendered, based on cross co-operation and internal improvement of different Public Units.



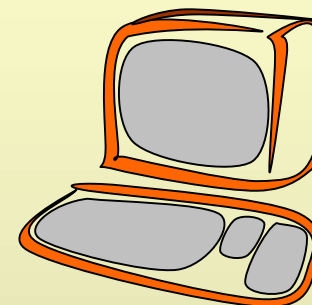
# IMPLEMENTING EGOVERNMENT

## 1. OVERVIEW. A DEFINITION



### ✉ BETTER SERVICES

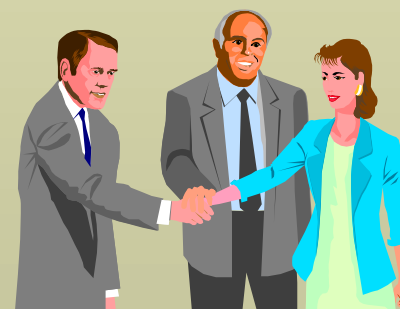
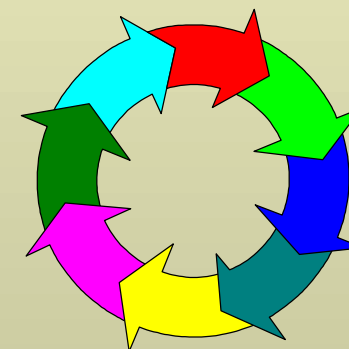
✉ Intensive use of ICT

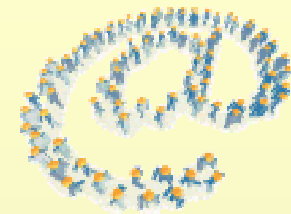


### ✉ INTEGRATED SERVICES

✉ Improvement of internal Administrations

✉ Cross co-operation

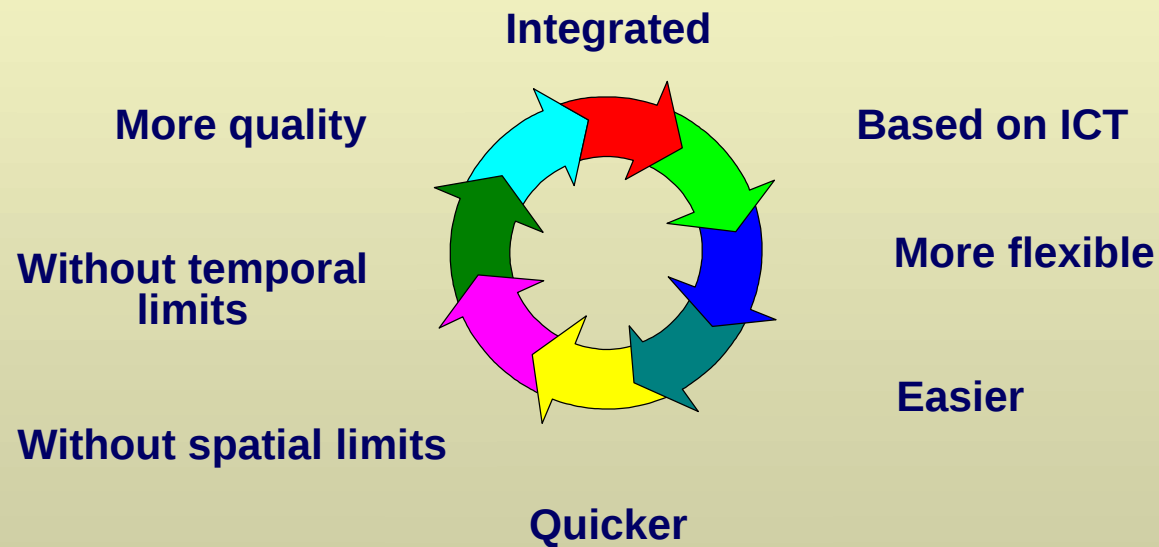


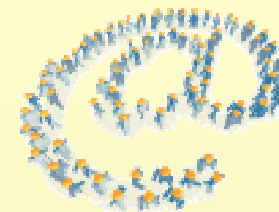


# IMPLEMENTING EGOVERNMENT

## 1. OVERVIEW. A DEFINITION

### BETTER SERVICES

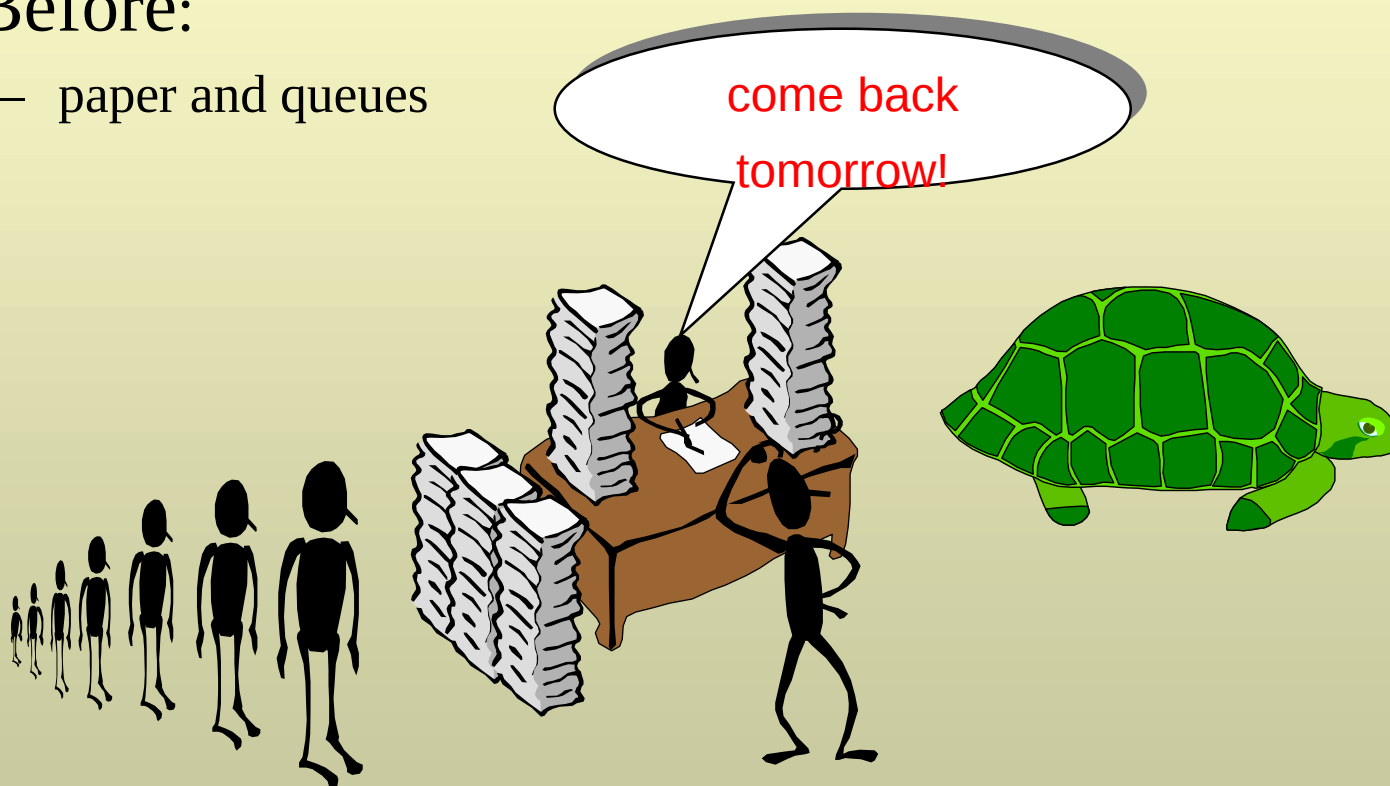


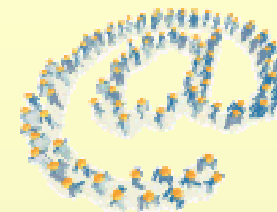


## IMPLEMENTING EGOVERNMENT

### 1. OVERVIEW. A CHALLENGE

- Before:
  - paper and queues



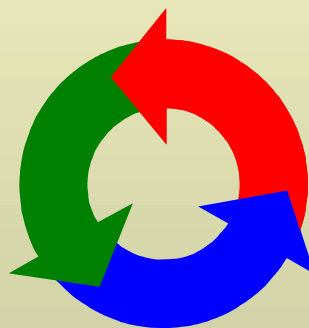


## IMPLEMENTING EGOVERNMENT

### 1. OVERVIEW. A CHALLENGE

- And Now, eGovernment =  $A^3$

Anytime



Anything

Anywhere



MINISTERIO  
DE ADMINISTRACIONES  
PÚBLICAS

SECRETARÍA DE ESTADO  
PARA LA ADMINISTRACIÓN  
PÚBLICA

CONSEJO  
SUPERIOR DE  
INFORMÁTICA

## IMPLEMENTING EGOVERNMENT 1. OVERVIEW. A CHALLENGE

Changing and  
enlarging  
traditional means

Fax

010 Call Center

TV

Files

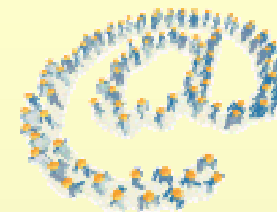
Mobile, WAP

Self service

PC

E-mail

Nápoli, 12 - 14 March 2001

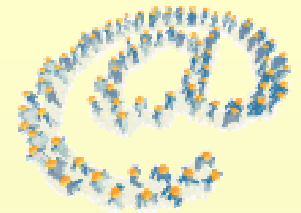


# IMPLEMENTING EGOVERNMENT

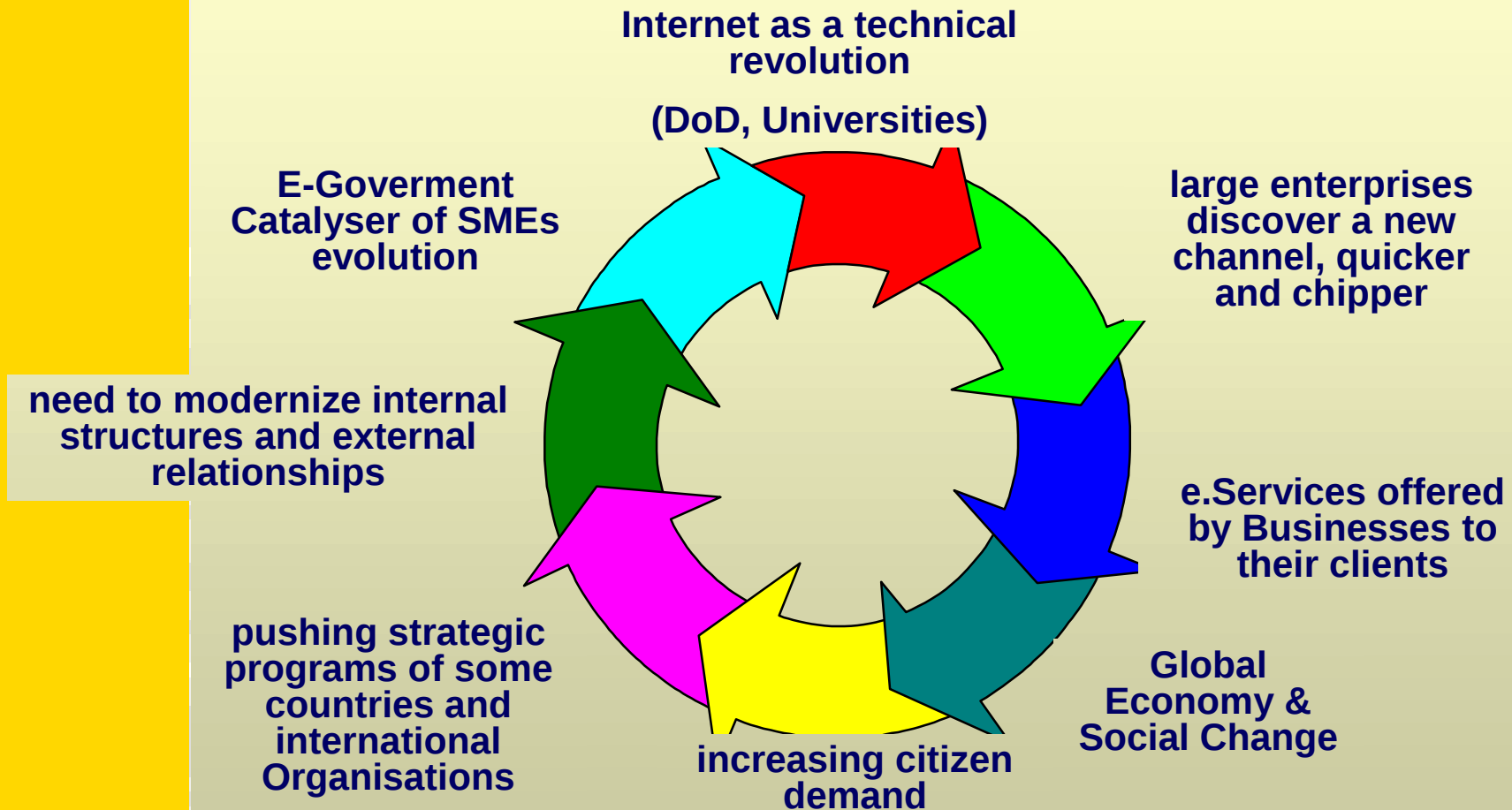
## 1. OVERVIEW. A CHALLENGE

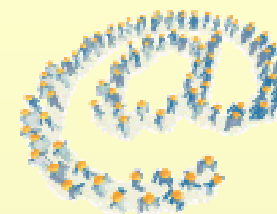
**Keeping the customer  
(citizen & business)  
satisfied**





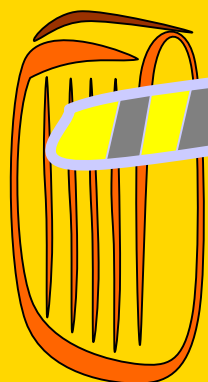
## 1. OVERVIEW WHY EGOVERNMENT?





# IMPLEMENTING EGOVERNMENT

## 1. OVERVIEW. THE RISKS: BARRIERS AND RECOMMENDATIONS



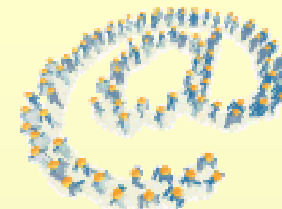
✉ Lack of Investments or insufficient budget

📄 A director plan with a general Framework of Investments and Risks Management is needed to face large-scale ICT projects derived from eGovernment implementation

✉ Lack of Regulation and/or technical standards

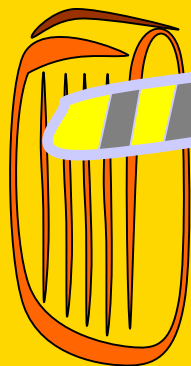
📄 Not only general laws but specific regulation is needed too, to rule and allow electronic services





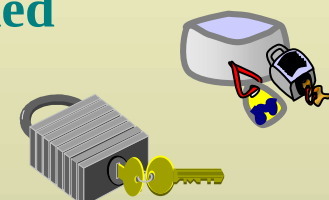
## IMPLEMENTING EGOVERNMENT

### 1. OVERVIEW. THE RISKS: BARRIERS AND RECOMMENDATIONS



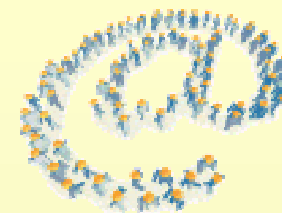
#### ✉ Lack of Security

- 📄 Technological adaptation and cultural change in civil servants and people in general is still needed
- 📄 Digital signature has to be widespread



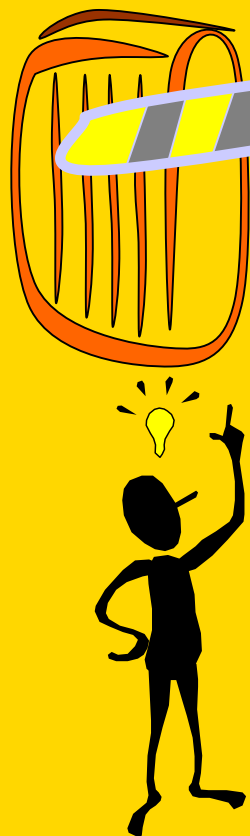
#### ✉ Lack of use of Electronic Payment means

- 📄 Credit and Debit Cards for Electronic payment should be fully permitted at official level

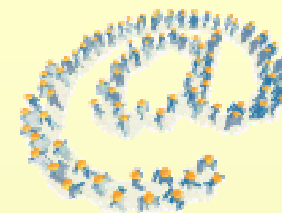


## IMPLEMENTING EGOVERNMENT

### 1. OVERVIEW. THE RISKS. BARRIERS AND RECOMMENDATIONS

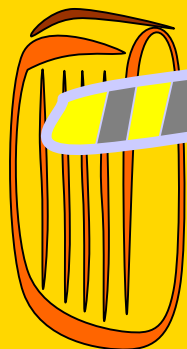


- ✉ **Problems with cross co-operation among Governments**
  - 📄 Consensus and co-ordination among different Public Administrations is needed, establishing joint committees and respecting its independence or autonomy
  - 📄 A great range of Technologies should be available by all the tiers of Public Administrations



## IMPLEMENTING EGOVERNMENT

### 1. OVERVIEW. THE RISKS. BARRIERS AND RECOMMENDATIONS

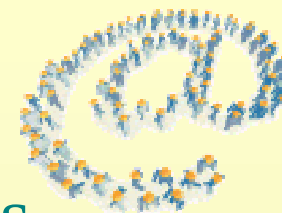


#### ✉ Lack of Motivation of ICT Government Employees

📄 Human Resources are a crucial factor for building e-Government. ICT personnel should participate in every Steering Committee

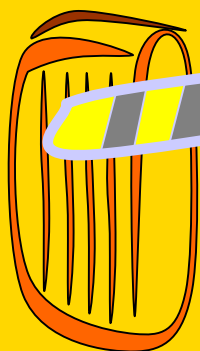
📄 ICT resources are in increasing demand in public and private sector and they are showing an important deficit in Public Administration. Salary policies should be reviewed

📄 Although Public Administrations can't afford private tariffs, motivate ICT Civil Servants is needed to avoid brain drain to private sector



## 1. OVERVIEW

### THE RISKS: BARRIERS AND RECOMMENDATIONS



✉ Lack of confidence from the Citizen's side.

📄 E-Government is, at least, as good and sure as conventional means are. Campaigns of information are needed

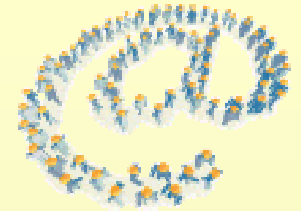


📄 E-Government has to preserve confidentiality and privacy

✉ Lack of social integration

📄 It is absolutely necessary to avoid discrimination and digital divide in the access to Technology. E-Government has to promote easy access to the new means

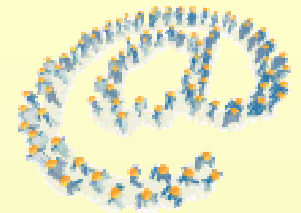
📄 E-Government should eliminate barriers developing and fostering the e-services adapted to handicapped, blind people, unemployed, etc.



## 1. OVERVIEW

### CRITICAL SUCCESSFUL FACTORS (I)

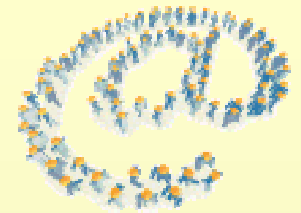
- Implement E-government implies a Corporate E-government Strategy with two main Goals:
  - Rendering integrated services to citizens and businesses
  - Internal Modernisation of Public Administrations



## 1. OVERVIEW

### CRITICAL SUCCESSFUL FACTORS (I)

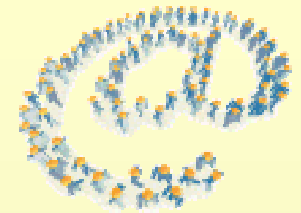
- **RENDERING INTEGRATED SERVICES TO CITIZENS AND BUSINESSES**
  - Co-ordination Unit with a Program leader
  - An Action Plan
  - An Investment Plan
  - Integrated Services built around e-citizen
  - Non stop (24 x 7) 100% electronic services
  - Reinforcing the citizen confidence in Public Administration
  - Ensuring everyone is included



## 1. OVERVIEW

### CRITICAL SUCCESSFUL FACTORS (II)

- **MODERNISATION OF GOVERNMENT BASED ON:**
  - Re-engineering of internal processes
  - Making a sound Human Resources policy
  - Using Multiple channels: banks, supermarkets, city halls, kiosks, ...
  - Working with private sector and universities to address the needs
  - Making efforts for cross co-operation with other administration bodies. General, Local, Regional or Supra-national Governments

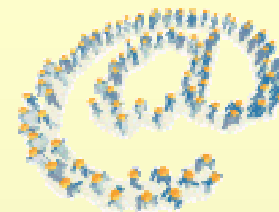


# E-GOVERNMENT IMPLEMENTATION

## 2. THE RESOURCES

### HUMAN RESOURCES

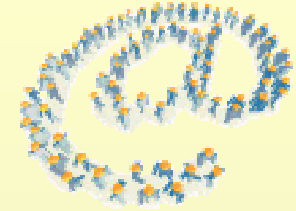
### THE BUDGET



## HUMAN RESOURCES

-  Crucial factor for building e-Government
-  ICT resources in increasing demand
-  Public sector ICT has an important deficit
-  Strategic importance of ICT for Business, Managing and decision making process
-  Many times Public Administrations can't afford private tariffs:
  -  Lack of motivation of ICT civil servants
  -  Technical obsolescence
  -  Brain drain to private sector
-  A whole Plan for adapting Human Resources (Specially those related to ICT) has to be developed. Need of flexibility and incentives, motivation...





## THE BUDGET

### Financing models

-  Internal of Public Administration

-  Partially outsourcing

-  Full outsourcing

-  Specific ICT investments are recommended

### Revenues

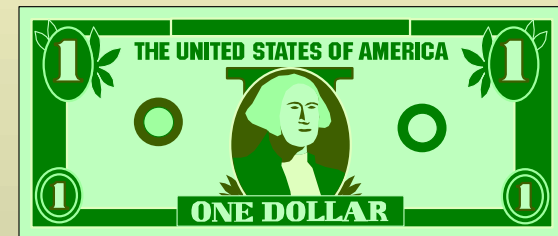
-  Public budget

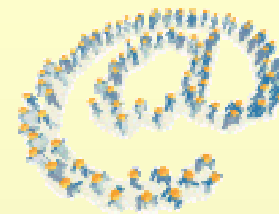
-  Grants/subsidy

-  Publicity

-  Partnership and agreements with private sector  
(depending of national laws and regulations)

-  Subscription to specific services



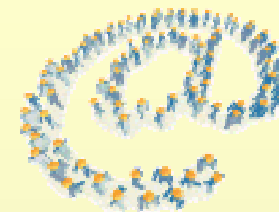


# E-GOVERNMENT IMPLEMENTATION

## 3. THE TECHNOLOGY AND THE STANDARDS

### THE TECHNOLOGY

### THE STANDARDS



## THE TECHNOLOGY. THE HARDWARE

### Main characteristics of the Servers:

#### Availability

-  Fault tolerance

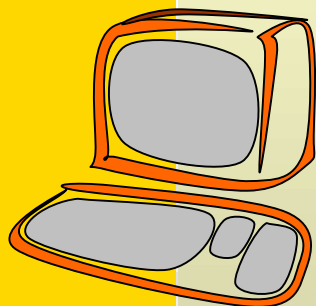
-  Mirroring & redundancy

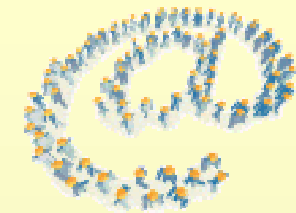
-  Loading Balancing

-  Clustering of processors

-  Server's interconnection and interoperability

-  Security controls





## THE TECHNOLOGY. THE HARDWARE

### Type of Servers:

 Web server

 Applications server Pages server

 Primary DNS server

 Secondary DNS server

 Searcher server

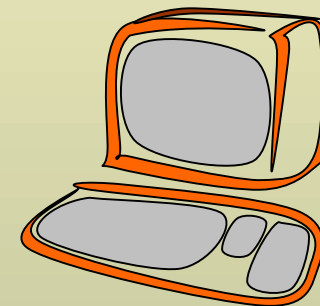
 DBMS server

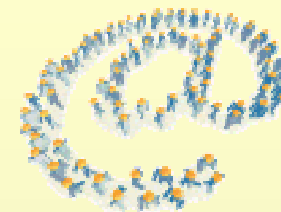
 Firewall server

 LDAP Directory server

 MHS server

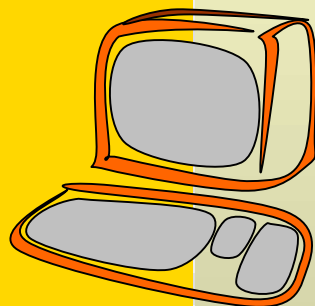
 Forum, chat, news server...



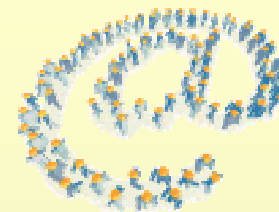


## THE TECHNOLOGY. THE HARDWARE

### Web server



-  Management and configuration performance.
-  Virtual server performance: Multiple sites in one physical location
-  Releases support in HTTP, XML
-  Security: certificates, PKI, basic rules on coding
-  Application development Standards: ISAPI, NSAPI filters

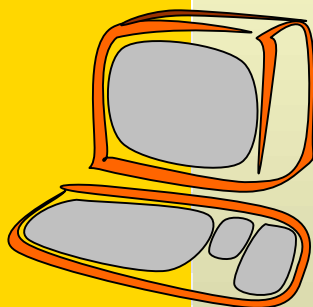


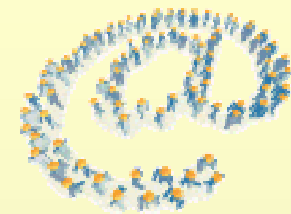
## THE TECHNOLOGY. THE HARDWARE

### Application server:

-  Environment for building applications
-  Session and Transaction Manager Support
-  Integrated Development Environment (IDE)
-  Web server Integration and Database access
-  Other capacities for Internet and e-commerce, directory services, security services, etc.

 Main application servers in the market are:  
iPlanet Application Server (Netscape), Oracle  
Application Server (OAS) and BEA Weblogic  
(BEA Systems)





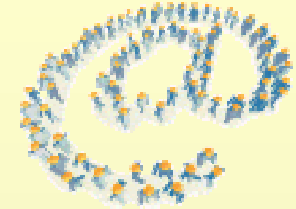
## THE TECHNOLOGY. THE SOFTWARE

 Software for each one of the servers and services: Directory, MHS, Navigator...

 DBMS (Relational and Textual) software

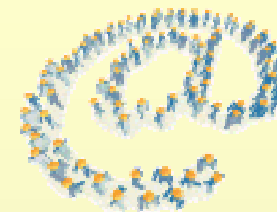
 Searcher Engine

 Content Manager



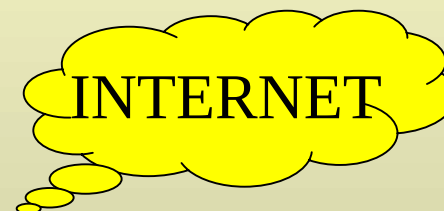
## THE TECHNOLOGY. THE SOFTWARE. Content Management. Main products in the market:

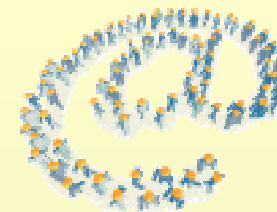
- **Documentum:** Good product, but it doesn't allow dynamic pages generation
- **Open Market:** Content Manager integrated with Document DBMS. It is not very powerful in personalization
- **BroadVision:** Very good performance, strong architecture. Very complex implementation and expensive
- **Vignette:** Powerful content management, good personalization. Expensive



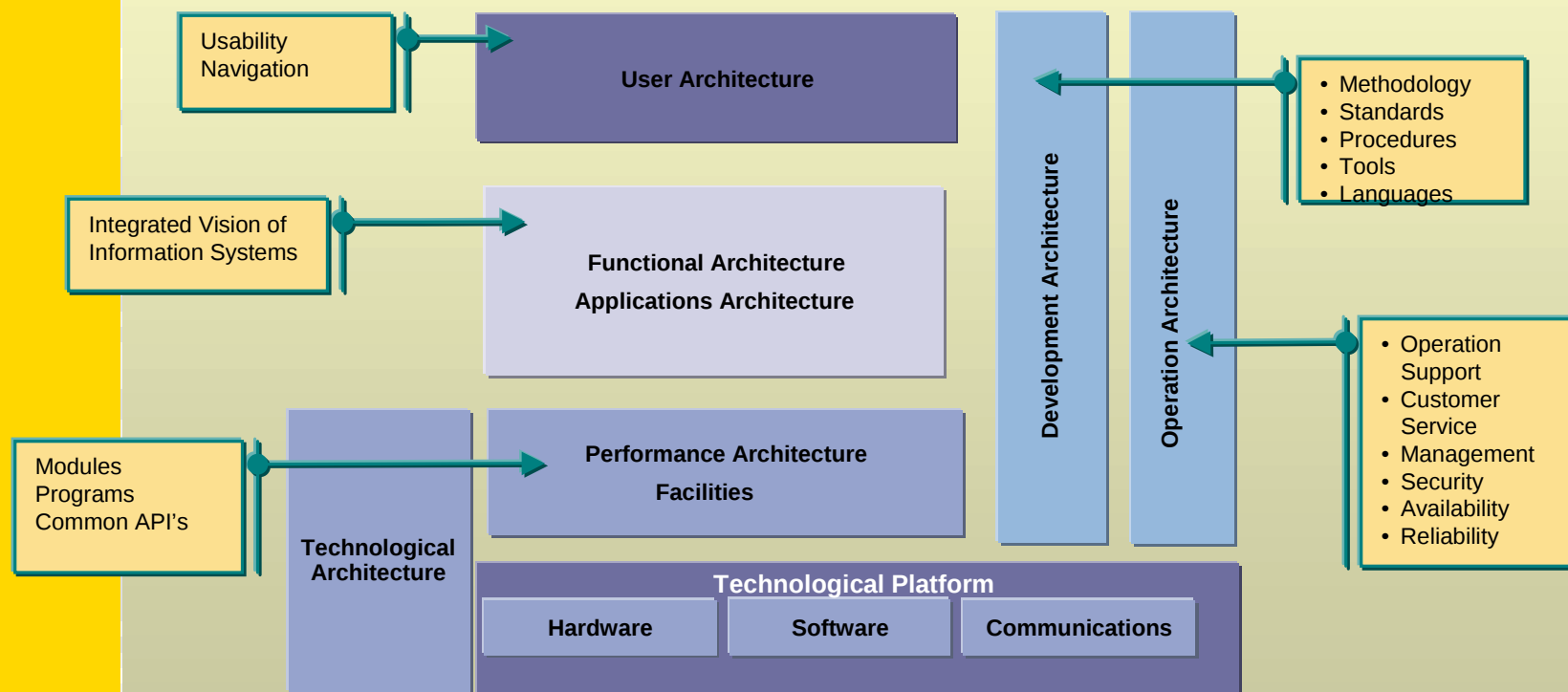
## **THE TECHNOLOGY. COMMUNICATIONS.** **Internet Protocol (IP)**

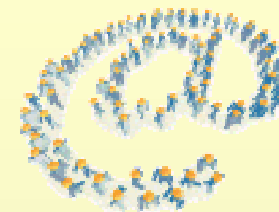
-  **Routers. Dynamic and static routing**
-  **Switches**
-  **Hubs**
-  **Virtual nets/segments**
-  **Relationship between domains**
-  **User's Relationship with domains**
-  **Shared resources**
-  **Fast Ethernet, ISDN, Optical fibre, ATM, Frame Relay...**





# THE TECHNOLOGY. THE ARCHITECTURE

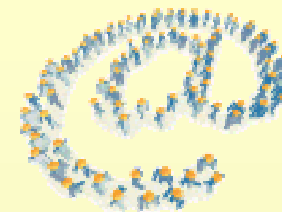




## THE STANDARDS TOPICS

 **A number of framework guidelines and technical assumptions have to be developed or adopted.**

- **Interchanging of formats (HTML, EDI, XML...)**
- **Security (PKI)**
- **Meta-data**
- **Interoperability**
- **Privacy**
- **Multipurpose smart cards**
- **Availability**
- **Quality**
- **Portals and Web sites**



## THE STANDARDS FORMATS FOR INFORMATION INTERCHANGE

 Currently there are basically two solutions for eCommerce:

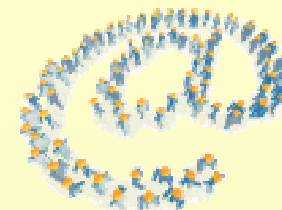
 Electronic Data Interchange (EDI)

 Extensible Markup Language (XML)

Recommendation

 XML seems to be the G2B solution for the future. Improved subset of SGML (Standard Generalised Mark-up Language) for information interchange on Internet





## THE STANDARDS SECURITY ASPECTS

- [-f] **Public Key Infrastructure (PKI)** has to do with the policy, the standards and the services that make it possible users to communicate in a framework of Authentication, Integrity, Confidentiality and No repudiation for a message or a transaction
- [-f] **PKI three main components:**
  - [-f] **Certification Authority (CA)**
  - [-f] **Register Authority (RA)**
  - [-f] **Directory and Repository Services. Standard: LDAP**
    - [-f] **Product leaders in the market: Netscape Directory Server and Novell Directory Services (NDS). The main Independent Software Vendors (ISV) support these products**



## THE STANDARDS SECURITY ASPECTS

### **Basic Services:**

#### Authentication

Two ends sending information have to be identified in an unmistakable way.

#### Integrity

It guarantees that data have not been modified during transmission from the origin to the destiny.

#### Confidentiality

To avoid that whoever without authorisation could see interchanged data.

#### No repudiation

To avoid the possibility to deny the authorship of transmitted data.

### **Mechanisms:**

#### Authenticated Interchange

#### Cipher

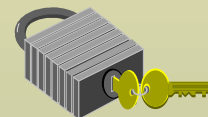
#### Digital Signature

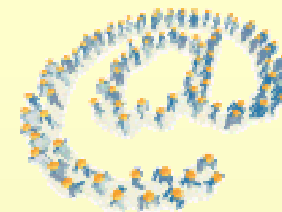
#### Certificates



Certification  
Authority

Register  
Authority





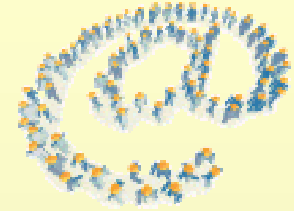
## THE STANDARDS SECURITY ASPECTS

Recommendations

 Some Security recommendations. Using:

- Secure operative systems with fulfilment of B level specifications
- Two factor cryptographic techniques for both authentication of users and servers
- 128 bits cipher channels between browsers and web servers and between web servers and data servers
- Centralized Databases for authority and authentication
- Databases in a secure zone
- Firewall

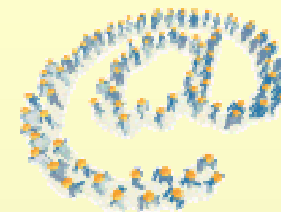




## IMPLEMENTING EGOVERNMENT

### 4. MAIN SERVICES

- INFORMATION
- INTERACTION, COMMUNICATION AND PARTICIPATION
- TRANSACTION



# IMPLEMENTING EGOVERNMENT

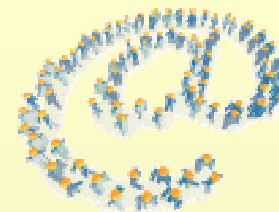
## 4. MAIN SERVICES

### INFORMATION

#### Attributes:

-  Relevancy, suitability
-  Fullness
-  Quality
-  Updating
-  Structure
-  Ease of access
-  Access for disabled people
-  Different channels
-  Corporate Identity and Image
-  Innovation
-  Multiple languages





# IMPLEMENTING EGOVERNMENT

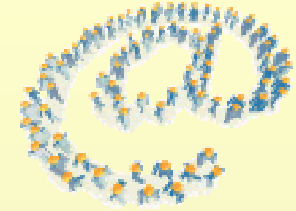
## 4. MAIN SERVICES

### INFORMATION

#### Types:

-  Consultation documents; statistical information; laws and regulations
-  News, press notices
-  Organisation Structure and Organisation Directory: postal address, telephone, fax, contact e-mail, URL, public attention timetable
-  Responsibilities and objectives of the units
-  On-line information about traffic density, weather, environmental pollution, water quality, etc.
-  Applications and Forms to unload with guidance for their completion
-  Access to Databases



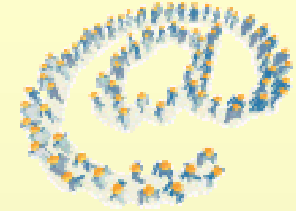


# IMPLEMENTING EGOVERNMENT

## 4. MAIN SERVICES

 **Communication, Interaction and Participation should:**

-  **Foster the opinion of the citizens**
-  **Help reinventing Government**
-  **Allow lodging complaints**
-  **Prepare the way for e-Democracy**



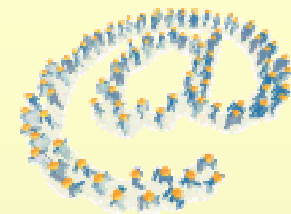
# IMPLEMENTING EGOVERNMENT

## 4. MAIN SERVICES

### Communication, Interaction and Participation

#### Types:

-  MHS, Citizen mail box
-  Chat, Forums
-  Forms to fulfil and send electronically
-  Electronic questionnaires, surveys and opinion polls.
-  Electronic Democracy



# IMPLEMENTING EGOVERNMENT

## 4. MAIN SERVICES

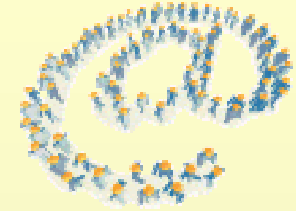
### Transaction

#### Types:

-  On-line steps of a procedure

-  Full procedures on-line

-  E.Commerce (electronic signature, electronic payment)



# IMPLEMENTING EGOVERNMENT

## 5. HOW TO IMPLEMENT EGOVERNMENT

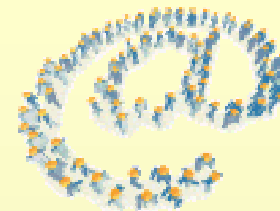
 **THE STRATEGY**

 **THE ACTION PLAN**

 **THE INVESTMENTS**

 **THE SPANISH EXPERIENCE**

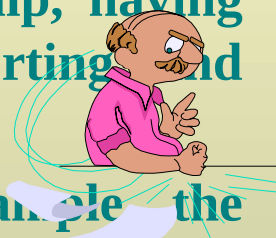
 **ONE EXAMPLE: THE SPANISH PORTAL  
OF PUBLIC ADMINISTRATION**

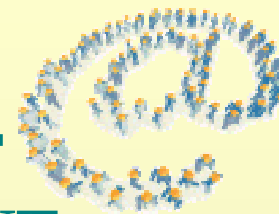


## IMPLEMENTING EGOVERNMENT

### 5. HOW TO IMPLEMENT EGOVERNMENT THE STRATEGY

- **A HIGH LEVEL OF POLITICAL COMMITMENT IS ABSOLUTELY NECESSARY:**
  - A Corporate e-Government Strategy
  - A Central co-ordination with a project leadership, having powers for monitoring, reporting and supporting and establishing his/her missions and functions
  - An Action Plan or Director Plan, as for example the Framework policy and guidelines, made by UK e-envoy office, or the Director plan within the Spanish INFOXXI Program
  - An Investment Plan
  - Cross co-operation and monitoring actions

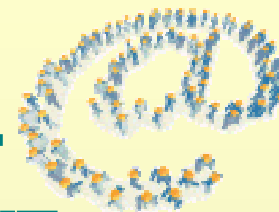




## IMPLEMENTING EGOVERNMENT

### 5. HOW TO IMPLEMENT EGOVERNMENT THE ACTION PLAN. STEPS (I)

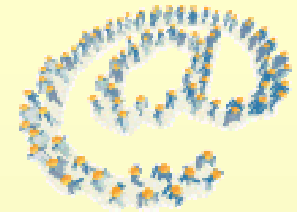
- 📁 **Viability Study, Opportunity Analysis**
- 📁 **Current situation Analysis**
- 📁 **State of the art Study, other countries and private sector experiences are useful**
- 📁 **Identification of the audience on the basis of market research**
- 📁 **Study of the different possible options**
- 📁 **Choice one option**



## IMPLEMENTING EGOVERNMENT

### 5. HOW TO IMPLEMENT EGOVERNMENT THE ACTION PLAN. STEPS (II)

- [-] Provision of resources, especially staff with the necessary skills
- [-] Definition of a set of e-government projects with milestones and deadline
- [-] Integration of the e-Government projects and the web sites within the business processes
- [-] Progressive implementation
- [-] Monitoring the development of the e-Government projects and the web sites, and its success
- [-] Definition of future on-line strategy



# IMPLEMENTING EGOVERNMENT

## 5. HOW TO IMPLEMENT EGOVERNMENT THE INVESTMENTS

### Investment Plan

#### Defining the Business Plan

#### Financial Model

#### Cost estimation:

##### Personnel

##### Running expenses

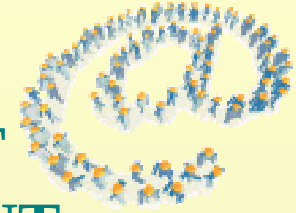
##### Technological Infrastructure

##### Development of the services

##### Customer Support

##### Marketing and advertising





# IMPLEMENTING EGOVERNMENT

## 5. HOW TO IMPLEMENT EGOVERNMENT THE INVESTMENTS

### Investment Plan

-  Defining the framework of relationship of the different participants: contractual, rights and duties, contributions.

-  Defining the financial strategy:

  -  investments

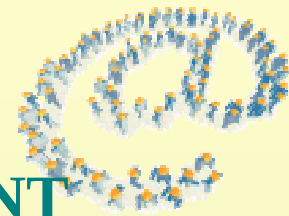
  -  periodicity

-  Private Sector participation:

  -  Public Procurement

  -  Auction

  -  Licensee



# IMPLEMENTING EGOVERNMENT

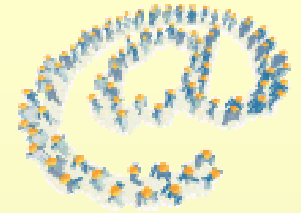
## 5. HOW TO IMPLEMENT EGOVERNMENT THE INVESTMENTS

### Financial models

 Internal Budget of Public Administration

 Partial outsourcing

 Total outsourcing



# IMPLEMENTING EGOVERNMENT

## 5. HOW TO IMPLEMENT EGOVERNMENT THE INVESTMENTS

### Revenues

#### Public Budget

#### Grants/subsidies (UE, other programs)

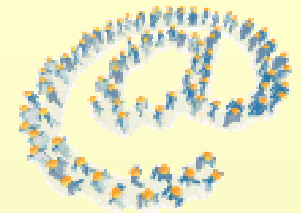
#### Partnership and agreements with public sector (depending of national laws and regulations)

#### Publicity

#### Subscription to specific services

#### Electronic Commerce

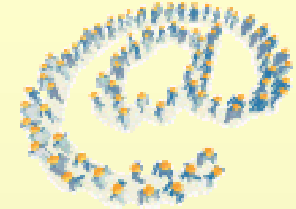




## IMPLEMENTING EGOVERNMENT

### 5. HOW TO IMPLEMENT EGOVERNMENT THE SPANISH EXPERIENCE. THE STRATEGY

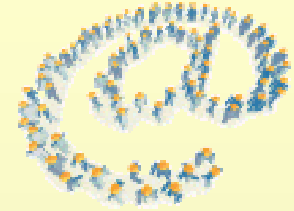
- The program INFOXXI (Ministry of Science and Technology, 1999). In charge of implementation of the Society of Information.
  - <http://www.map.es/csi/infoxxi.htm>
- The White Book for the improvement of Public services (Ministry for Public Administration, 2000). The Ministry for Public Administration is in charge of implementation of eGovernment through the Council on ICT.
  - <http://www.libroblanco.map.es>



## IMPLEMENTING EGOVERNMENT

### 5. HOW TO IMPLEMENT EGOVERNMENT THE SPANISH EXPERIENCE. THE ACTION PLAN

- The program INFOXXI has four lines of action, one of them is eGovernment. The Unit leader of this line is the Ministry for Public Administration. The program (2000-2003) has:
  - Concrete commitments and projects (> 250 projects),
  - Concrete dates and dead line to implement them,
  - Concrete investment plan,
  - Concrete units in charge of definite actions and milestones,
  - Monitoring actions,



## IMPLEMENTING EGOVERNMENT

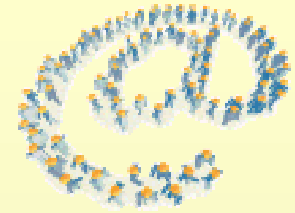
### 5. HOW TO IMPLEMENT EGOVERNMENT

#### THE SPANISH EXPERIENCE

#### THE INVESTMENTS

- ✉ **A four-year plan of investments 2000-2003.**
  - ✉ **5.000 Million Euro.**
  - ✉ **Decentralised investments. Each Ministry manages its own investments under the supervision and monitoring of the leader of the whole project.**

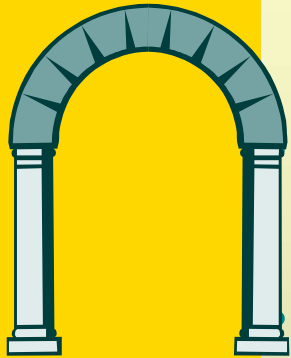




## IMPLEMENTING EGOVERNMENT

### 5. HOW TO IMPLEMENT EGOVERNMENT

#### ONE EXAMPLE



**Investments: 200 million Euro (2001-2002) of Public budget.**

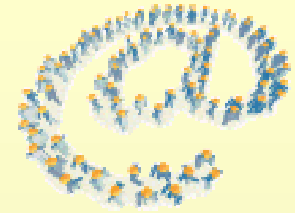
**Launching date:**

- June 2001 (Phase I)
- First semester 2002 (Phase II)

- **The language available:**

- Spanish (Phase I)
- Co-official languages + English (Phase II)



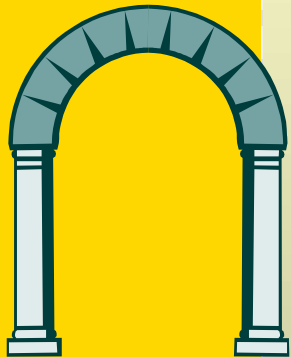


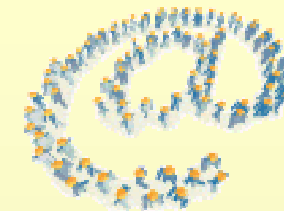
## IMPLEMENTING EGOVERNMENT

### 5. HOW TO IMPLEMENT EGOVERNMENT

#### ONE EXAMPLE

- Unit in charge: Council on ICT (Ministry for Public Administrations).
- Cross Co-operation through correspondents in the different Ministries, Autonomous and Local Agencies:
  - Central Government (Phase I)
  - Regional and Local Government (Phase II),





## IMPLEMENTING EGOVERNMENT

### 5. HOW TO IMPLEMENT EGOVERNMENT

#### ONE EXAMPLE

#### Analysis of current situation

Other portals analysis. Spanish e-Government situation, Relationship with other projects.

#### Portal Model

Options Definition  
Options Assessment  
Best suitable option Choice

#### Implementation Plan

Implementation Environment  
Definition and Risks Management  
Effort Evaluation  
Resources, Schedule and Investment

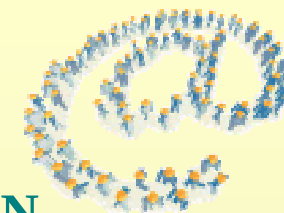
#### Prototype Design and Development

Prototype Development

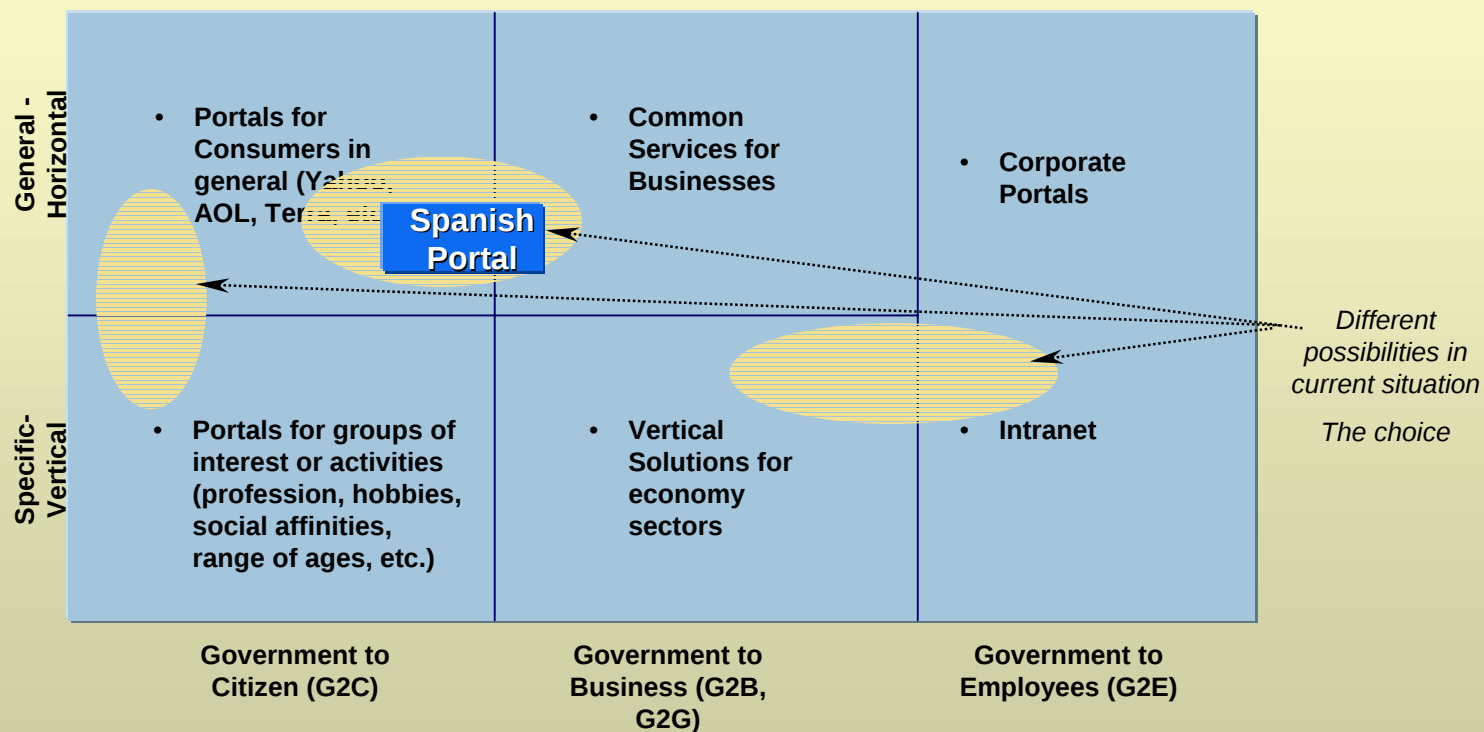
#### Technological environment

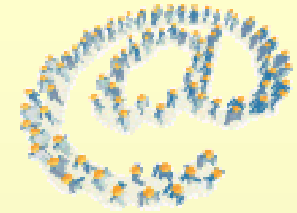
Know how and state of the art of technological environment in Portal development: Market trends, hardware and software solutions, methodology and standards, etc.

**Portal of the citizen Technical, Managerial and Operative Framework.**



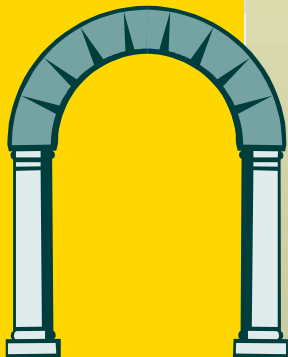
## ANALYSING THE CURRENT SITUATION

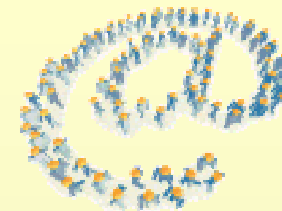




## MAIN PLANNED SERVICES PHASE I

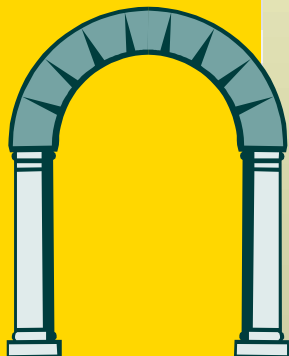
- A powerful searcher engine (Verity + Content Manager Vignette)
- A specific searcher by Topics and sub-topics
- A full Directory of Public Administrations
- A set of links to Public Administrations web sites
- On-line Services as declaration and payment of taxes; social security transactions; purchasing of publications; purchasing of railway tickets, etc.

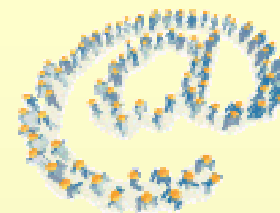




## MAIN PLANNED SERVICES PHASE I

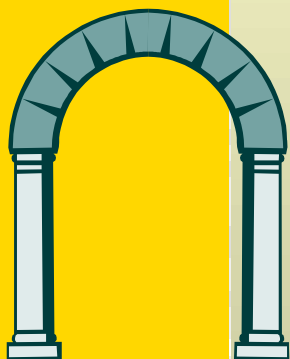
- Forms Repository (about 100 downloading forms)
- Public Procurement with subscription service
- Public Employment (access to a Data Base)
- Grants (access to a Data Base)
- Legislation (access to a Data Base)
- News
- Digital Certification
- Electronic payments





## MAIN PLANNED SERVICES PHASE II

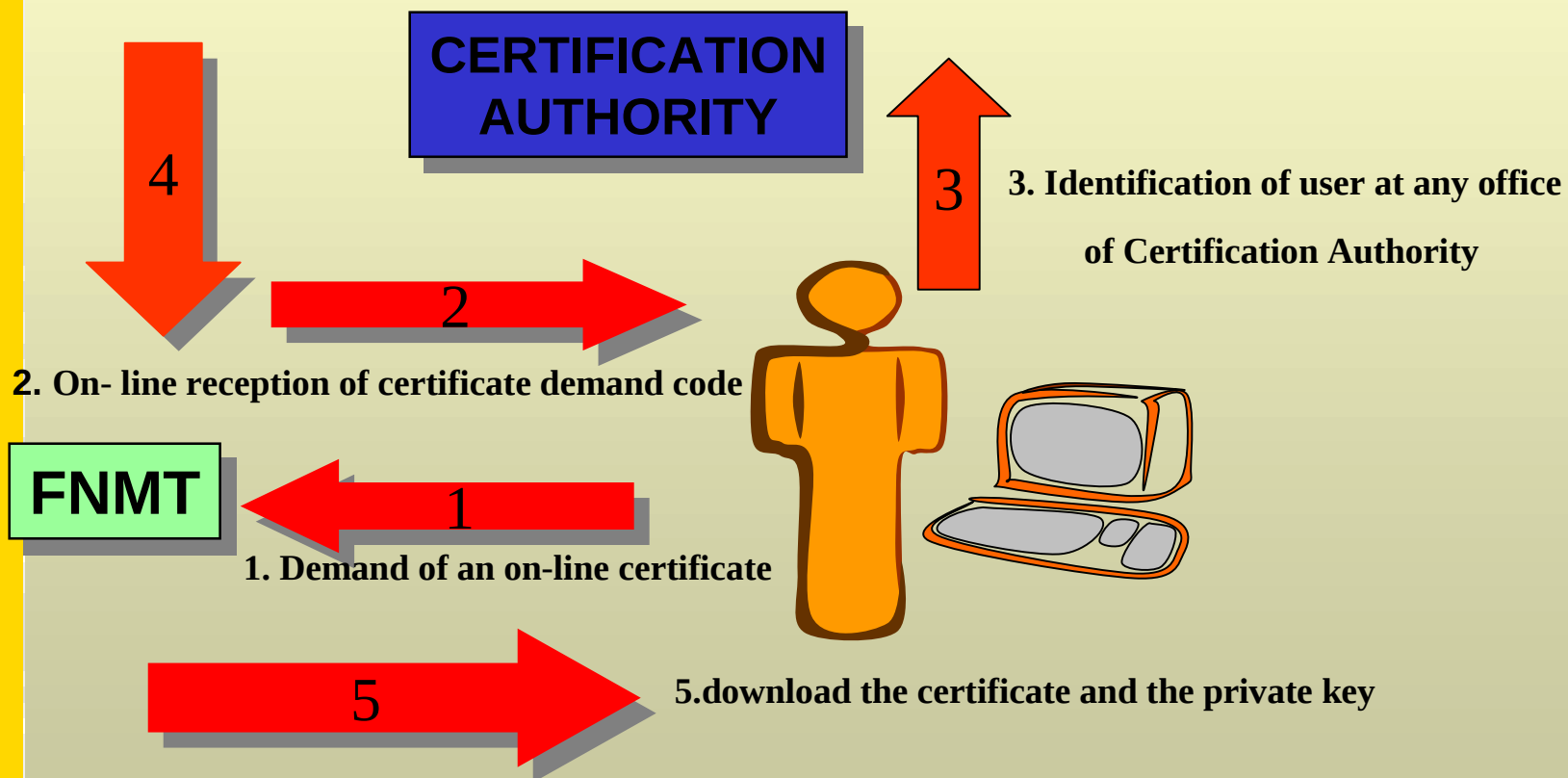
- **Electronic signature**
- **Third party tokens**
- **Some Events of citizens life**
- **Personalization**
- **Services for Disable people**
- **New channels (Mobile WAP, UMTS)**
- **E-mail box for the Citizen**
- **FAQ**





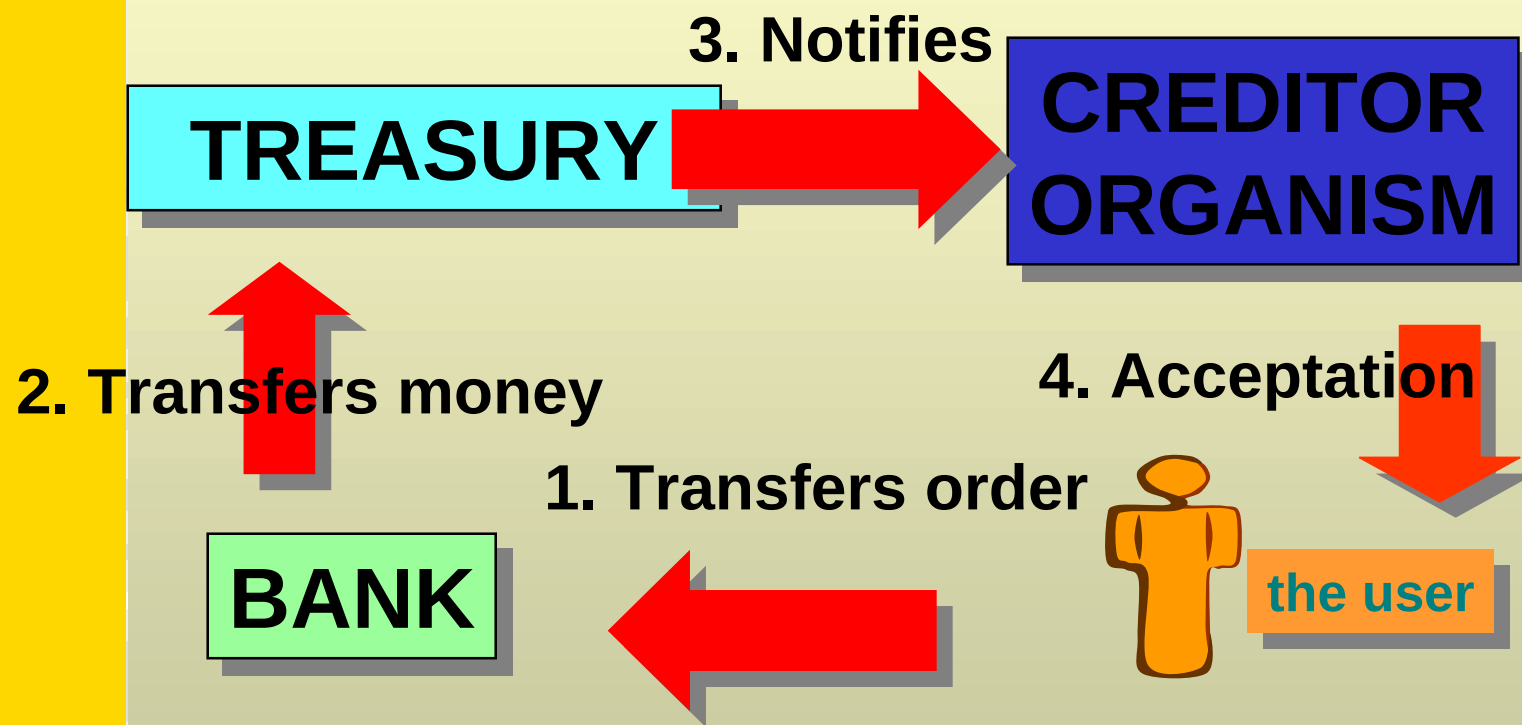
## Digital Certification

4. Certification Authority agency verifies the identity  
and informs the Certification Authority (FNMT)



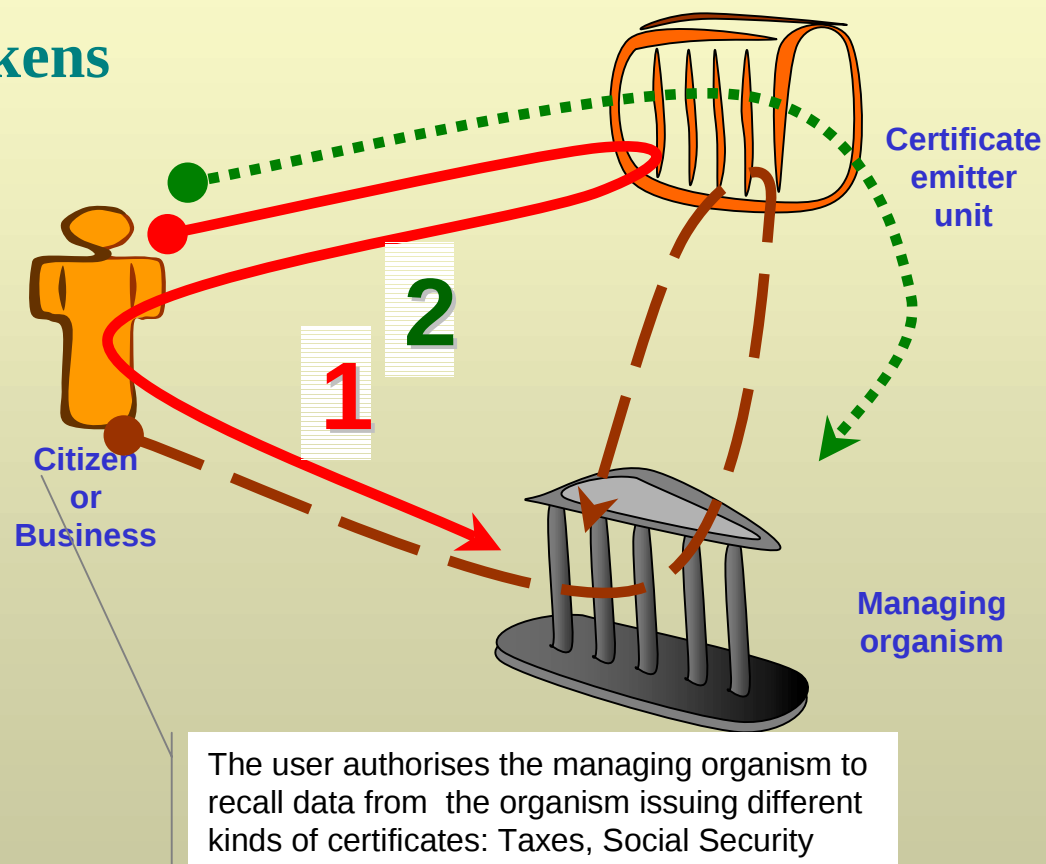


## Electronic Payment





- Tokens





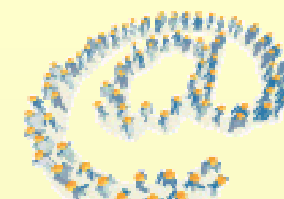
## SOME EXAMPLES OF ELECTRONIC SERVICES

- National Tax Agency. Ministry of Treasure: <http://www.aeat.es>
  - On-line declaration and payment of any tax (personal and business)
- Social Security. Ministry of Labour and Social Matters: <http://www.seg-social.es/contenidos/comun/ssatiende/menu/index.htm>
  - On- line submission of affiliation to the system
- National Network of Spanish Railways (RENFE). Ministry of public works: <http://www.renfe.es>
  - On-line purchase of Railways tickets
- The Official State Gazette (BOE) Ministry of the Presidency. <http://www.boe.es>
  - Daily official gazette free of charge
  - Electronic sale by credit card of any official Spanish publication

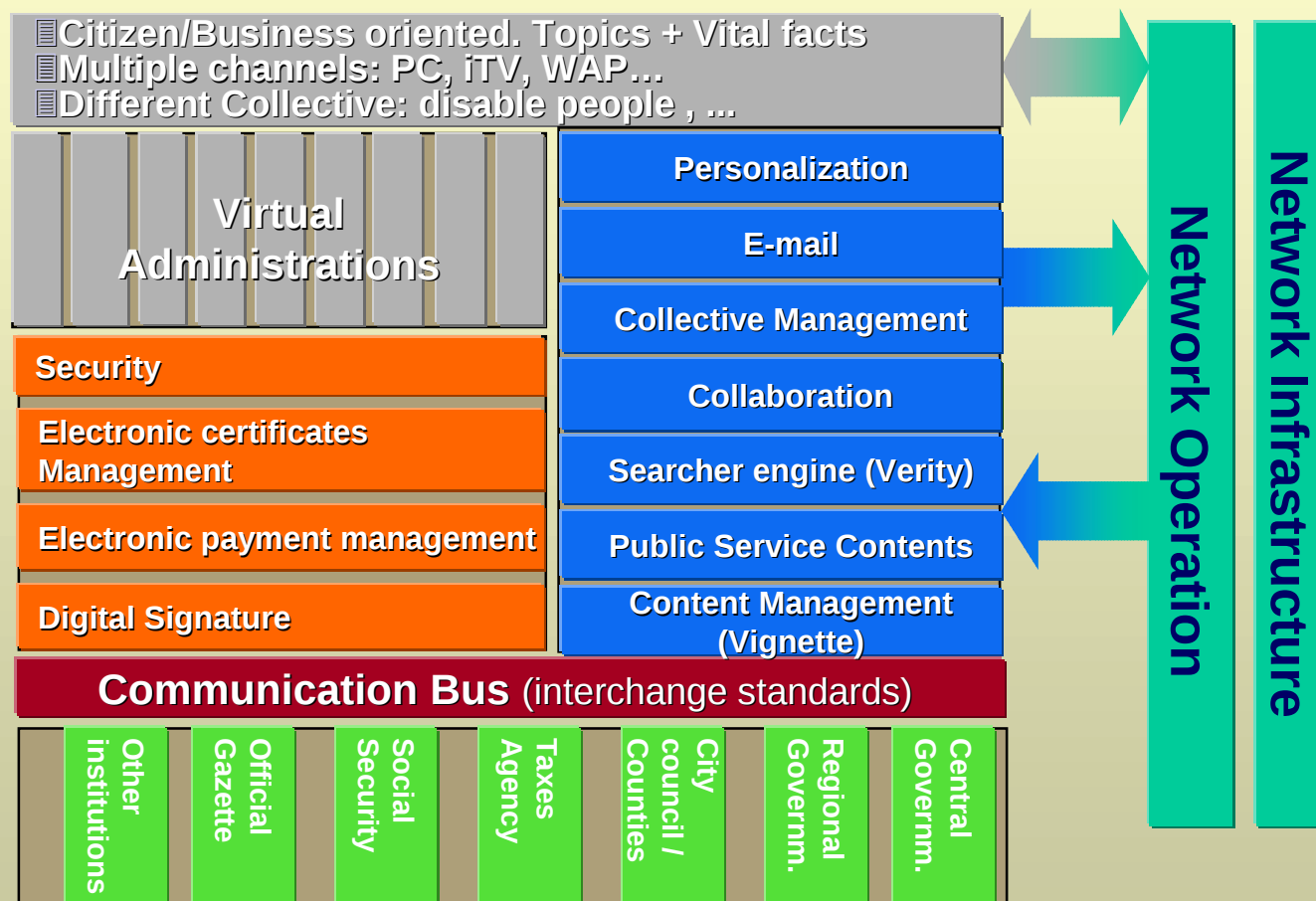


## IMPLEMENTING EGOVERNMENT

### 5. HOW TO IMPLEMENT EGOVERNMENT ONE EXAMPLE



Summary of services

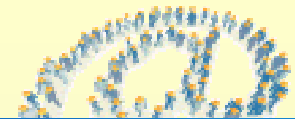




MINISTERIO  
DE ADMINISTRACIONES  
PÚBLICAS

SECRETARÍA DE ESTADO  
PARA LA ADMINISTRACIÓN  
PÚBLICA

CONSEJO  
SUPERIOR DE  
INFORMÁTICA



**El Portal del Ciudadano - Netscape**

Archivo Edición Ver Ir Comunicador Ayuda

Anterior Sigüente Recargar Inicio Buscar Guía Imprimir Seguridad Parar

Marcadores Netsite: <http://portal.map.es/> Elementos rel.

Internet Buscar Novedades inter

---

**ADMINISTRACIÓN GENERAL DEL ESTADO**

# administracion.es

Portal del Ciudadano

[Inicio / Búsqueda](#) [Procedimientos y formularios](#) [Ayudas y Subvenciones](#) [Empleo Público](#) [Licitaciones Públicas](#)

**SERVICIOS**

DIRECTORIO

SERVICIOS EN LINEA

PUBLICACIONES

LEGISLACIÓN

ENLACES DE INTERÉS

BUZÓN DEL CIUDADANO

AYUDA PORTAL

SUGERENCIAS PORTAL

**Drogas NO**

**Nueva campaña del IRPF**

**Información acerca del euro**

**Último reemplazo**

Buscar:   [Opciones](#)

## Búsqueda por Materias

Agricultura, ganadería y pesca

CONSUMO

CULTURA

DEFENSA

DEPORTES

DOCUMENTOS PERSONALES

ECONOMIA

NATURALEZA Y MEDIO AMBIENTE

PENSIONES Y PROTECCION SOCIAL

RELACIONES CON LA ADMINISTRACION

RELACIONES INTERNACIONALES

SALUD

SOCIEDAD

SEGURIDAD CIUDADANA Y PROTECCION

**NOTICIAS**

Crecen las exportaciones españolas

Entra en vigor la nueva ley de enjuiciamiento civil

Crece el número de internautas

España a la cabeza en donaciones

**Resumen de prensa**

Documento: Ejecutado

[Inicio](#) Watch400 [El Portal del Ciudadano](#) Explorando - egovern... Microsoft PowerPoint... 12:54

Napoli, 12 - 14 March 2001

67



**And That's all folks!**  
**I was wondering if... in spite of everything... you would  
like to keep in contact with me:**



- G. Nistal
  - Phone: +34.91.5861726
  - Fax: +34.1.91.5861920
  - c/M<sup>a</sup> Molina, 50 3<sup>a</sup> 355, 28071 Madrid, Spain
  - e-mail:  
gloria.nistal@sgci.dgopti.map.es
  - URL:  
– <http://www.map.es/csi/>