The Italian Government "Digital Protocol" Initiative By Linda Giuva and Lucilla Garofalo,

The speech outlines principles, tools, particularities and achievements of the Italian legislation on records electronic management. After a short introduction about the political and cultural contexts, within which the innovation matured, and about records requirements in our jurisdiction, we shall describe the main characteristics of the Italian model for records management, its relations with the national archival tradition and the international standards, the current issues and difficulties for its full implementation. The Italian e-government legislation, in particular the regulations on records management, was established in 1990- 2000 period, that was characterized by a very significant transformation of the relations between public administrations and people. In 1990, in fact, for the first time in Italy, even if later than in other countries, the so-called "law on transparency" (17/1990) established access rights for people to information and records of the public administrations. In order to make public administration closer to the needs of people and organizations, this law promoted a process of radical reform in the public sector, based on rationalization and simplification of business processes with more attention to the performance (and the results) of the public activities. Records system has been considered the core of this reforming process (it if records are not properly arranged is impossible to replay quickly and effectively to citizens' needs) so rules and tools for producing, managing, keeping and preserving records become again of primary importance.

Technological innovation has supported this reforming process but in our country new issues have arisen concerning particularly the need of ensuring the electronic records the same legal value as the paper records. In the context of a "civil law" jurisdiction the written record is the only one which is able to guarantee wrights and transactions. For this reason the creation of records (i.e. form, formulas and signature) is at the basis of any legally recognized action, public or not.

To promote technological innovation in the public sector several regulations has been produced about especially legal value of electronic records (l. 59/1997), digital signature (dpr 513/1997), as means to certify the record's integrity and the author's identity (authenticity of record), and records electronic management systems.

The laws on records management that are currently in force in the public sector have been established from 1998 (Regulation on digital protocol management 428/ October 20,1998) to 2000 (Consolidation Act on Administrative records 445/December 28,2000) through a consulting process which has involved several different professional communities: jurists, archivists, IT specialists and managers of the public sector. Just last March the "Code of digital public administration" (dlg 82/2005) has been published but it has not replaced the previous regulations regarding the records electronic management.

The purpose was to guarantee to the record system:

- Reliability, by a lasting arrangement, responsibilities' control, certainty of data during records creation or capture;
- Authenticity, i.e. records and information integrity in space (transmission) and time (keeping);
- Accessibility to records' information preserving their readability over time.

These regulations have fully acknowledged the main principles of the Italian archival tradition, already established in a law dated 1900 (rd 35/1900), which provided general and national rules for the State central administrations' records keeping systems in the active and the semi active phases. This law was in force until 1998.

The key principles are the following:

- unitary conception of records and archives, which involves a consistent management of the complete records' life cycle (active, semi active and historical phases);
- protocol registration, classification scheme and filing as tools required for the correct management;
- control of the National Archival Authority on each management phase.

Actually, the transformations that involved Italian institutions affected also the records systems. In particular: the transfer of several functions from the central to the local institutions; the available technologies and the administrative culture, as mentioned above. Contemporary records and their management complexity have required the creation of new tools. Among them we shall mention those which have represented the most relevant innovation in our country: the creation in each public administration of the Service for records management and archives, which has to be entrusted to a person of high profile and with archive technical expertise; the records disposition authority; the obligation for each administration to prepare a Manual of records management, a formal text on policies and guidelines related to the records system at any phase of its management and keeping; the need to have in the staff records management professionals.

We shall briefly describe the Italian legislation about records electronic management systems. Only two specifications.

The first one is that legislation concerns both electronic and paper records. It has been a realistic resolution considering the current conditions of the public administrations records systems and the need to manage the transition from hybrid to completely electronic systems, transition that appears more and more long and complex especially for the long-term preservation problems.

The second specification is that the regulations offer to the administration a range of ICT applications for records systems, which varies from the digital protocol system (so-called "nucleo minimo") to a records electronic management system integrated with business processes management (workflow) and the whole administration's information system (content and knowledge management). Every administration may choose the technological level to reach.

The essential basis and the first step forward the records electronic management is the digital protocol that, according to law, public administrations had to implement by January 1, 2004.

The protocol is a registration system of some essential information about ingoing and outgoing records. It also assigns each record a progressive and unique number that unquestionably identifies it into the administration's records system. The protocol certifies that a record has been created and sent or received. It is an ancient tool, born at the end of 1700s during Napoleonic administration in order to control the growing number of records coming from the increase of the State functions. In Italy, it is evidence of existing records and tampering a protocol register is a penal crime.

According to legislation, the mandatory elements for registration are the following:

- Protocol number (assigned by system and unchangeable)
- Registration date and time (assigned by system and unchangeable)
- Sender or addressee (unchangeable)
- Subject (brief description of the content, unchangeable)
- Electronic record impression (it is so called the outcome of as hashing process that generates a univocal string of a fixed number of bit so that two different texts have not the same impression).

Technological innovation has changed the protocol from static to a dynamic tool, which can perform more functions than before and can be integrated with other electronic systems, inside and outside the administration. Some example of new functions are: structured or full text researches;

- control on assignation and transmission of records to competent personnel or sector;
- controlled lists of senders and addressees;
- treatment of record's subject supported by vocabulary controls;
- possible links to records flow management or workflow;
- interoperability with protocol systems of other administrations.

In other words, the digital protocol keeps its legal function but it can also become part of an electronic information system that manages records and business processes and interacts with other activities and applications in order to use the whole administration's knowledge.

In consideration of the importance the protocol has within the record system, a great attention has been paid to security. It is provided that:

- Registration must be completed without interruption;
- a daily list of the registrations is saved and eventually printed;
- detailed procedures are set for the emergency register in case of error, interruption or malfunction of the system;
- detailed procedures are set if an error occurred on any unchangeable information.

In this last case deleted registration must be stored and preserved.

As soon as the registration is completed, the signature takes place. It consists of marking or attaching to the original record the following elements:

- protocol number;
- date and time of registration;
- name of the administration to which the record system belongs.

The protocol signature can also include other elements, such as classification code, name of the unit that the record has been assigned and/or other useful information if they are available at the moment.

Protocol registration and signature are contemporary operations. Together with the classification, which at the opposite can take place later, they form the so-called "nucleo minimo" of the records electronic management system.

Registration and signature data are in the form of a standard XML file. They represent a set of metadata that identify the record and are available also for other operations: for example, their automatic capture by the protocol system receiving the record.

In addition to the digital protocol, legislation states that public administrations must produce other relevant tools. We shall mention those at which many administrations are currently working more: the Manual of records management the classification scheme.

The Manual of record management is a formal text that

- describes the records management and preservation systems,
- lists the assigned responsibilities
- provides instructions for all activities concerning records management.

The Technical rules, established on October 31, 2000, specify what is necessary the Manual describes. For example:

- the flow of all records (internal, incoming and outgoing);
- the rules for registering records received through particular way of transmission (fax, e-mail or registered posts);
- the rules for assigning records to the competent units;
- the list of the records left out the protocol registration or having a particular kind of registration (invoices or minutes);
- the classification scheme;
- the disposition authority integrated with the classification scheme;
- criteria and procedures for assigning rights or restrictions to access and for defining internal and external users profiles;
- electronic records safety and security plan;
- the emergency protocol register.

The Manual is to be published and available also on the Web. It is a real innovation for the Italian public administration which

- increases the level of transparency towards external users (other administrations, companies, individuals);
- promotes sharing rules and internal users' assent;
- promotes standardization processes, improving records and business processes quality and supporting interoperability;
- is the basis for training the internal users.

In conclusion, the Manual is essentially a communication tool, which is effectiveness only if the operations are clearly and completely described. Therefore, a Manual reflects the specific conditions and the choices that, observing general legislation, the single administration has made. The National Centre for IT in the public administration (CNIPA) prepared a model to support institutions writing their Manual, which is available on the web site www.protocollo.gov.it/news_manual.asp.

As far as it concerns the classification scheme, it is crucial toll for records management and preservation. Many initiatives have been undertaken in order to support administrations

- to develop a consistent methodology
- to promote normalizing, sharing and interoperability among administrations.

The results of these initiatives have been models of classification scheme based on business activities. In particular:

- a model of classification for records produced in the course of activities that all administrations share, such as human and financial resources management, planning, electronic systems and so on; (Public administration's High School www.sspa.it)
- classification schemes for specific sectors as Universities, local institutions, banks and so on, available on the web too (
 www.archivi.beniculturali.it/divisione_III/archiviregioni.htm,
 www.archivi.beniculturali.it/divisione_III/comuni/presentazionealtitolario.html ,
 www.unipd.it/archivio/clas_idx.htm)

The Italian Model of records management is perfectly compliant with the international standards of record management that were published in 2001: ISO 15489 Information and documentation: records management and the Model Requirements for Management of

electronic Records (MoReq). The differences depend on both jurisdiction and archival tradition.

To offer a complete overview of the Italian legislation it is necessary to say that in 2000 – 2005 period some specific regulations were established about the use of electronic records in the public sector. In particular three decrees stated:

- the acknowledge of the EU directive on electronic signature (Dlgs 10/2002);
- the technical rules for the public system of interoperability (dlgs 42/2005);
- the regulation for exchanging records through certified electronic mail systems (dpr 68/2005).

Some few words about this last one. By now the e-mails are very common as means of communication among administrations and between administrations and people. The certified e-mail system provides to the sender an electronic signed return receipt which is evidence that the record has been sent to and received by the addressee.

But managing e-mail as record is still critical because the mail systems certified or not, are not always integrated with the digital protocol and the whole records system. The most common practice is printing e-mail and managing them as paper records. Otherwise, some administrations are testing integrated systems.

Despite these efforts at legislative level to promote ICT in the public sector, the full adoption of technologies is late and many administrations did not yet move from the paper to the digital protocol.

The delays come from absent, poor or discontinuous funding, inadequate human resources and scarce or lacking care about the organizational matters.

In order to support the administrations to overcome the delay, outsourcing procedure have been developed and the Cnipa currently works as Application server provider and offers via Internet services or software for the records electronic management. The benefits appear obvious for administrations of small dimension, more complicated, also considering costs and effectiveness, for bigger administrations which, on the contrary, could test different and perhaps more innovative solutions. But it is not enough.

Applying IT to records systems requires a remarkable engagement to analyse business processes, procedures, organizational framework, personnel distribution and its needs of training. If this engagement is inadequate, planning and implementing electronic record systems meet a serious obstacle.

All of us know that long-term preservation is the most serious issue. International researches and undergoing experimentations say that the possibility to preserve information cannot be demanded only to technologies but it is necessary to define precise and transparent procedures and identify the necessary responsibilities. In any case the complexity of the technological solutions for the preservation of electronic records elaborated so far, as digital signature and time stamping, discouraged their common use and particularly the replacement of paper records with their digital copies. In the last case, many administrations are following the indications of the Archival Authority which suggests to use caution, even though the government authorities promote hard dematerialization. Only when there will be more guarantees on long term preservation the process towards electronic records system in the public sector, especially in our jurisdiction, can be completed.

In conclusion, we have to tackle issues that require not only technological and legal but political solutions: it is necessary to develop a real capacity of planning, organizing, governing the whole records system.