

# Interoperability matters

Manuela Finetti, Head of the IDA Unit, outlines the importance of interoperability in support of e-government...

The combination of the use of advanced ICTs, especially the internet, to enable new ways of working in public administrations, with the enhanced provision of information and interactive services accessible over different channels, is the foundation of e-government.

This requires not only that administrations communicate and share information, but also that administrative processes are re-organised and able to co-operate. In fact, as is becoming more and more evident, the great challenge of e-government is for public administrations to rewrite the rules on how they work internally, interact with their customers, and use ICTs.

Interoperability is a key word here, since it means, above all, the co-operation of systems, processes and people, in order to deliver seamless and customer-centric services.

Interoperability encompasses three different aspects:

- Technical, which is concerned with the technical issues of linking up computer systems, the definition of open interfaces, data formats and protocols;
- Semantic, the objective of which is ensuring the precise meaning of exchanged information is understandable by any application involved; and
- Organisational, which deals with modelling organisational processes, aligning information architectures with organisational goals, and helping these processes to co-operate.

Interoperability can be described as a chain that allows computer systems, information and ways of working to be interlinked both within organisations and across organisational boundaries, with other administrations, enterprises or citizens.

An example highlighting the key role of interoperability concerns the delivery of e-government services which, seen from the perspective of the customer, relate to a single business event, but may involve multiple dealings with separate administrative bodies. To complete even simple transactions, citizens and enterprises incur costs and may

waste time by having to deal with different ministries and agencies. To bring public administrations closer to citizens and enterprises, many Member States are thus aggregating their e-government services around 'life events' and 'business episodes'. Agreement on common standards and specifications is required to support these services. But this is not sufficient. The joining up of administrative processes is also required for the development of such services.

Also, e-government services do not stop at administrative or even national boundaries. For these services to support the single market and its associated four freedoms requires not only interoperability both within and across organisational and administrative boundaries, but also across national boundaries with public administrations in other Member States. Citizens who work and relocate within the Union, and enterprises that trade across it, will need to interact electronically with public administrations in many Member States. They should be able to do this with the same ease as local citizens and enterprises. For this to occur, not only should national e-government services be open to cross-border users, but also the supporting back office of Europe's public administrations should be interoperable to facilitate any supporting information exchanges.

In essence, interoperability is a fundamental requirement from both the economic and technical perspectives, for the development of efficient and effective e-government services at both the national and pan-European levels, including the regional and local ones. Today, however, the reality is the emergence of 'islands' of e-government that are frequently unable to interoperate due to fragmentation in the development of the services at all levels of public administration.

## Highlighting the key role of interoperability

The IDA (Interchange of Data between Administrations) programme has been addressing the issue of interoperability, as the central factor towards the joining up of public administrations across Europe, in support of the implementation of a broad range of Community policies.

At policy level, in co-operation with other relevant services of the European Commission, IDA has recently prepared a

working document, entitled 'Linking up Europe: the importance of interoperability for e-government services'.

The objective of the working document is to highlight the critical issue of interoperability in achieving the Lisbon goals and in helping Europe's public administrations to work together more effectively to achieve shared policy objectives and work as effectively with their customers.

The document seeks to achieve acceptance from key policy and decision-makers on the need for interoperability in Europe, both within and between public administrations and with enterprises, to obtain the necessary commitments for this to happen at all levels (ie. European, national, regional and local), and to ensure that any consequential adjustments of European or national policies occur.

It examines interoperability requirements between administrations, as well as between these and the enterprises, and at the European level. Interoperability activities in the Member States and in the enterprise sector, and a number of relevant Community initiatives (within R&D/IST, eTEN, eContent, IDA and standardisation) are also referred to and briefly described.

Developed from the conclusions of the e-government conferences held under the auspices of the Swedish and Belgian presidencies of the European Council, the document was submitted as an input to the high-level e-government conference organised jointly by the European Commission and the Italian presidency in Como, on 7th-8th July 2003. If you wish to read it, you can download the document from the IDA website, at the address: <http://europa.eu.int/ispo/ida/export/files/en/1522.doc>.

### How to make progress

To address the policy issues posed by e-government, strategies as well as business models and associated interoperability frameworks are required. Because interoperability is essential at both the national and pan-European levels, the Member States' administrations, the Commission and the European institutions and agencies can achieve synergies by collaborating in interoperability initiatives, and by improved co-ordination between Community programmes in the field of interoperability.

In addition, as envisaged in the e-Europe 2005 Action Plan, close co-operation with standards-based interoperability initiatives in the enterprise sector and with the European standardisation organisations should be encouraged. If standards-based, interoperable, business-to-business and business-to-consumer solutions with market acceptance are developed to the extent expected, their adoption for administration-to-business and administration-to-citizen services should be assessed and, where appropriate, encouraged.

Of high relevance is one of the horizontal actions currently under way within IDA, with the objective of developing a

European interoperability framework. The framework is addressed as a key requirement in the eEurope 2005 Action Plan, which sets the target for the European Commission, by 2003, to issue an agreed interoperability framework to support the delivery of pan-European e-government services to citizens and enterprises.

The interoperability framework consists of a set of policies, standards and guidelines describing the way in which organisations have agreed, or should agree, to do business with each other. It is to provide the specifications for interlinking information systems, share and reuse information, and bring forward the co-operation of administrations that wish to exchange information but may have different internal processes and structures.

The framework is based on the premise that each Member State has, or is in the process of developing, its own national government interoperability framework, and thus focuses on supplementing national interoperability frameworks by adding the pan-European dimension. The initial drafting was based on the analysis of the existing frameworks of France, Germany and the UK, and was made in close co-operation with a group of experts from a number of public administrations across Europe.

An open consultation on the first release of the interoperability framework is planned for launch in September 2003 (from the IDA website, <http://europa.eu.int/ispo/ida>), in order to gather comments from all relevant parties (administrations, citizens, businesses and suppliers). Successive versions will be made available on a regular basis, to take into account the most recent developments in the area of technical, semantic and organisational interoperability.

On 8<sup>th</sup> July, the European Commission adopted a proposal for a programme succeeding and drawing on the achievements of IDA II. As the name of the new programme (Interoperable Delivery of pan-European e-government services to Public Administrations, Businesses and Citizens – IDA<sup>abc</sup>) indicates, this is intended to be a key factor for the achievement of interoperable e-government in Europe, particularly in relation to its trans-border aspects.

The opinions expressed here are those of the author and must not under any circumstances be considered or expressed as representing the official view of the European Commission.



**Manuela Finetti**  
 Head of IDA Unit  
 IDA Central Office  
 European Commission  
 Directorate General  
 Enterprise Unit D/2  
 B-1049 Brussels  
 Belgium

Tel: +32 2 296 0109  
 Fax: +32 2 296 0109  
[manuela.finetti@cec.eu.int](mailto:manuela.finetti@cec.eu.int)  
[europa.eu.int/ispo/ida](http://europa.eu.int/ispo/ida)