

# Innovation Ecosystems

The European Innovation Initiative for e-inclusion of SMEs and territorial development, empowering Business Ecosystems through Digital Ecosystems technologies

## A Specific Roadmap

### General information

1. **Business ecosystem is part of the i2010 initiative:** “*create the conditions for the development of innovative territorial ecosystems*”, Commission Staff Working Paper, Extended Impact Assessment, p61). The creation of “digital business ecosystems” aims at providing SMEs, and specifically micro enterprises (93% of the 22 million European SMEs which represent approximately 66% of the total employment) with ICT applications and services that improve their efficiency, business integration, and synergies within EU territories, but also that enable their integration of local value chains within the global market.
2. **Innovation ecosystems constitute a pointer to the future.** The Web makes it possible today to develop deeper relationships with customers by linking the information systems of interacting organisations together in order to reduce or eliminate the time required to react to changing market requirements. Starting from the metaphor of business-software interaction as an ecosystem (by definition self-adaptive, autonomous and self-configurable), multidisciplinary research (i.e. the convergence of “info”, “bio”, and “socio”) in self-organising systems and network dynamics allows co-operation among dynamic value chains in several industry sectors. Building on the work and achievements of IST-FP6, work in ICT in FP7 will aim at positioning Europe at the top of the emerging knowledge-based economy and at ensuring that ICT is rapidly transformed into economic benefits for Europe’s businesses, in particular SMEs.
3. **The development of innovation ecosystems is a powerful capacity building instrument for implementing a comprehensive European horizontal industrial policy** by linking RTD policy (FP7), innovation and support to SMEs (CIP), cohesion policy (“innovation poles”, research-driven and industrial clusters, “regions of knowledge”), and international co-operation policy. The digital ecosystem is to become an ICT-enabling technology supporting the emergence and the sustainability of knowledge-based networked business ecosystems, i.e. geographical (or virtual) areas where specific policy initiatives foster growth and employment and improve innovation, productivity and social inclusion, through the optimal use of local assets empowered by ICT.

This initiative aims at:

- creating a real-world ecosystem that offers direct practical benefits to European SMEs;

- creating an ‘open knowledge’ community of research that will support the trend towards the extension of traditional disciplines into new disciplines;
- promoting and developing ICTs among SMEs in European regions in order to promote growth and employment and to understand under what conditions ICTs can best facilitate the formation of communities of practice among SMEs;
- contributing to the creation of a dynamic business environment based on knowledge sharing and access, which will eventually bring IST applications and services to all businesses;
- contributing to the i2010 communication goals, in particular those regarding the creation of a single European information space;
- promoting co-operation between the EU and emerging countries in Latin America and the Indian subcontinent where the industrial fabric is similar to the one in Europe (many SMEs with most of them being micro enterprises), thus opening up strong and durable relationships between countries and regions.

## Behind Us

Date	Event
September 2002 December 2002	Presentation of the Commission discussion paper: “Towards a network of digital ecosystems”. Cycle of workshops.
April 2003	The first call for proposals of the FP6-IST, within the strategic objectives SO3.1.9 “Networked Business and Governments”, includes the focus “IST as driver for small business and government reorganisation through local development processes including small business ecosystems.”
November 2003	Start of the first project – a large IP called DBE – building the founding elements of digital ecosystems.
March 2004	Establishment of the sector “Technologies for Business Ecosystems” within the “ICT for Enterprise Networking” Unit.
May 2004	Definition and implementation of a “cluster” of R&D projects related to digital ecosystems.
April – May 2005	Launch of a 2005 cycle of seminars for re-tuning the concept: <ul style="list-style-type: none"> <li>• Commission Workshop on “Digital Ecosystems: Re-tuning the user requirements after 3 years”</li> <li>• Commission Workshop on “Digital Ecosystems: Re-tuning the research priorities after 3 years”</li> <li>• An on-line consultation followed the seminars, in order to produce a “position paper”.</li> </ul>

June 2005	<b>Position Paper “The Digital Ecosystems Research Vision: 2010 and Beyond”</b> reflecting a consensus among stakeholders on basic principles and recommendations concerning the ICT research priorities needed for deploying digital ecosystems in Europe. <a href="http://www.digital-ecosystems.org/events/2005.05/de_position_paper_vf.pdf">http://www.digital-ecosystems.org/events/2005.05/de_position_paper_vf.pdf</a>
July 2005	<b>Advanced International Summer School on “The Emergence of Novel Organisational Forms in the Globalising Planet: Toward the business ecosystem?”</b> <a href="http://www.ebms.it/experience/summer/Summer2005/home.html">http://www.ebms.it/experience/summer/Summer2005/home.html</a> . Worldwide experts analyse the innovation ecosystem model and the peculiarities of European ecosystems.
October 2005	Public, open source release of the first version of open source digital ecosystem service-oriented infrastructure. First services independently implemented. Six active EU pilot regions.
November 2005	Presentation of the DBE project and the digital ecosystem concept at WSIS exhibition – Overwhelming interest from Latin America and South East Asia. Requests for bilateral co-operation from Brazil and for EU support regarding the deployment of new pilot regions in Latin America.
November 2005	As a result of the FP6 5 <sup>th</sup> IST call for proposals, which includes the focus “ <i>Digital Business Ecosystems for SMEs</i> ”, inclusion in the ranking list of above-threshold proposals of an NoE, two SSAs (on digital ecosystem governance and ecosystem deployment), and some STREPs.
December 2005	Conference “ <i>E-Business: the way forward</i> ”, Cambridge. Session 5 on “ <i>Digital Ecosystems for SMEs: roots, multiplier effects and regional growth stakes</i> ” organised by DG-INFISO/D5 in co-operation with DG ENTR.
January 2006	New projects joining the Digital Ecosystems cluster selected from the IST Call 4 (3 new STREPs).

## Ahead of Us

Date	Event
9-10 February 2006	<b>Digital Ecosystem Cluster <u>concertation meeting</u></b> . Definition of further operative synergies among the projects of the cluster. <b>Launch of the multi-stakeholder process of consultation for the “Innovation Ecosystem Initiative”</b> .
April-June 2006	New projects joining the Digital Ecosystems cluster selected from the FP6-IST Call 5 (1 NoE, 2 SSAs, some STREPs)
February – May 2006	<p><b>Multi-stakeholder open consultation process for defining the Innovation Ecosystem Initiative.</b></p> <p>Defining the requirements and the options for the governance, ethical rules and the sustainability mechanisms of the network of regional digital ecosystems, <b>producing the stakeholders’ position papers</b> on:</p> <ul style="list-style-type: none"> <li>• <u>a strategy and instruments</u> for a pan-European deployment of digital ecosystems and mechanisms for local self-sustainability</li> <li>• <u>future innovation and research initiatives</u> in digital ecosystems and priorities resulting from open consultation</li> <li>• <u>the structures and the bodies</u> needed for               <ul style="list-style-type: none"> <li>○ the <i>sustainability</i> of the local/regional digital business ecosystems,</li> <li>○ for the <i>global technical interoperability</i> of the technical infrastructure,</li> <li>○ for the <i>definition of a “bill of rights”</i>: the “constitutional” rules and the obligations, of the digital ecosystems</li> </ul> </li> </ul> <p><b>Online Open Consultation for collecting</b> ideas from the user and decision-maker perspectives for refining the concept of digital ecosystem and the Innovation Ecosystem Initiative.</p>
June 2006	<b>Stakeholder Position Paper</b> resulting from the multi-stakeholder open consultation. This position paper should reflect the consensus attained on the all above mentioned elements
August - October 2006	<b>Preparation of a Staff Working Paper</b> of the European Commission regarding the policy framework on the Innovation Ecosystem Initiative.
October 2006	<b>Digital Business Ecosystem Conference</b> , presenting the Innovation Ecosystem Initiative, the EC staff working papers, the outcomes of the forum, the multi-stakeholder position papers, the development and the deployment of digital ecosystems technologies (organised by the DBE project, in cooperation with the Committee of Regions).

From November 2006	<b>Establishment of the first structures</b> for the governance and the self-sustainability of the network of regional digital ecosystems, coming out from the conclusions of the multi-stakeholder process.
End 2006	The first call for proposals of the FP7-IST, within the “Applications Research” theme, which includes a focus on digital business ecosystems IST. In this area, international cooperation is also foreseen.
Fall 2007	<b>EC Conference on the Innovation Ecosystems of Knowledge</b>
2007-2008	Preparation, submission and possible adoption of a <b>communication on digital ecosystems</b> : <ul style="list-style-type: none"> <li>- Setting out what the Commission has done so far (“wrapping-up document”), by summarising the achievements of the DE-TF</li> <li>- Presenting “digital ecosystem” as a policy approach for IST deployment, oriented towards SME-based economies and territorial development, which complements other existing approaches</li> <li>- Presenting “digital ecosystem” as a major technological development to achieve ICT full potential in term of ICT support environment for Businesses and SMEs</li> <li>- Drawing a clear picture on the way digital business ecosystem strategy should develop, in order to meet economic and social goals of various EU policies (Information Society, Regional Policy, Enterprise and Industry, Competition, Civil Society, Competition).</li> </ul>
2007-2013	<b>Further research on digital ecosystems technologies pursued under the IST theme of the 7<sup>th</sup> Framework RTD Programme.</b>  <b>Further EU uptake</b> from new regional networks of local SMEs and <b>deployment</b> of state-of-the-art digital ecosystems technologies, under the ICT Policy Support Programme of the <b>Competitiveness and Innovation Framework Programme (CIP)</b> , targeting involvement from a large number of <b>EU regions</b> , with the support of the <b>Regional Funds mechanisms</b> in eligible regions. International co-operation with key areas (i.e. Latin-America, South-East Asia) and deployment of ecosystems.