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# Access to scientific information in the digital age: European Commission initiatives

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**Open Access Infrastructures:  
The Future of Scientific Communication  
Athens, Greece**

**15 - 16 December 2008**





# Outline

- 1. Scientific information in the digital age: the European Commission's approach**
- 2. European level policy development**
- 3. Open Access in FP7**
- 4. Capacity building activities**
- 5. Conclusions and next steps**



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# EC approach (1)

- **Importance of access, dissemination and preservation for research**
- **The internet has led to unprecedented possibilities which are not yet sufficiently exploited**
- **Need to improve return on investment in R&D, and thus maximise socioeconomic impact**
- **A question of principle: reliable access to results funded by taxpayers' money**
- **Fair remuneration for scientific publishers for the added value they bring to the scientific publication process**
- **International developments: many existing policies, e. g. Wellcome Trust, NIH, CNRS, Harvard University, etc.**



# EC approach (2)

## Evolving legal foundations

### Current: European Community Treaty, Title XVIII (Research & Technological Development)

- Art. 163: “The Community shall have the objective of strengthening the scientific and technological bases of Community industry and encouraging it to become more competitive [...]”.
- Art. 164: In pursuing these objectives, the European Community is responsible for “dissemination and optimisation of the results and activities in Community research [...]”.

### Future: Treaty on the Functioning of the EU (Lisbon Treaty) Title XIX (Research & Technological Development and space)

- Art. 179 (ex Art. 163): The Union shall have the objective of strengthening its scientific and technological bases **by achieving a European research area in which researchers, scientific knowledge and technology circulate freely**, and encouraging it to become more competitive [...]”.



# EC approach (3)

## Roles of European Commission

- **Policy-making body: launch of policy debate at the European level; encourage Member States to take coordinated action**
- **Research funding body: set access and dissemination rules for the EC-funded research (Framework Programmes)**
- **Capacity-building / supporting body: fund digital infrastructure and relevant research and networking activities**



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# European policy development (1)

## Consultation phase

- 2006: “Study on the economic and technical evolution of the scientific publication markets in Europe” (public consultation)
- 2007: Stakeholder conference “Scientific Publishing in the European Research Area”; Petition & Brussels Declaration
- 2007: Green Paper (public questionnaire) on the future of the European Research Area; knowledge sharing axis included section on open access



# European policy development (2)

## Decision-making phase

- **2007: Communication COM(2007)56 on “Scientific information in the digital age: access, dissemination and preservation”**
- **2007: 23 November 2007: Council Conclusions on Scientific Information in the Digital Age**



# European policy development (2)

## Implementation phase

- **Dec. 2007: ERC Scientific Council adopts Guidelines for Open Access**
- **Aug. 2008: Launch of Open Access Pilot in FP7**
- **2009: follow-up of Member State actions**



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# Open access in FP7 (1)

## Framework Programme (FP) for Research and Technological Development

- **Current Framework Programme: FP7 “7th Framework Programme for Research and Technological Development”**
- **Duration: Seven-year programme, 2007 to 2013**
- **Budget: over €50 billion (substantial increase compared with FP6)**
- **In its role as funding body, the Commission can set rules for access to research results financed through Framework Programmes**

→ **Goal of maximising socio-economic impact of R&D investment**



# Open access in FP7 (2)

## Reimbursement of publication costs in FP7 “Gold” open access

- New in FP7
- Publication costs (including “gold” / author pays open access fees) are “eligible” costs for 100% reimbursement
- Limited to duration of project
- Uptake to be monitored during and at the end of FP7
- Legal reference: FP7 Model Grant Agreement II.16. (Upper funding limits): [...] 4. For other activities not covered by paragraphs 1 and 2, inter alia, management activities, training, coordination, networking and dissemination (including publications), the contribution may reach a maximum of 100% of the total eligible costs. [...]



# Open access in FP7 (3)

## Open Access Pilot in FP7: scope

[http://ec.europa.eu/research/science-society/open\\_access](http://ec.europa.eu/research/science-society/open_access)

- Launched in August 2008; covers ca. 20 % of FP7 budget
- Pilot action based on self-archiving / “green” open access
- Applies to seven areas of the 7th Framework Programme:
  - 6 month embargo: “Health”, “Energy”, “Environment”, “Information & Communication Technology” (Cognitive systems/robotics), “Research infrastructures” (e-infrastructures)
  - 12 month embargo: “Socio-economic Sciences and Humanities” and “Science in Society”



# Open access in FP7 (4)

## Open Access Pilot in FP7: requirements

- **Special Clause 39 (legal basis) requires:**
  - **deposit of an electronic copy (published version or final manuscript) in an institutional or subject-based repository at moment of publication.**
  - **best efforts to ensure that this electronic copy becomes available "open access" (freely and electronically available to anyone):**
    - **immediately if the publication is published "open access", or**
    - **within 6 or 12 months of publication, depending on area**
- **Applies to all new FP7 grant agreements signed after August 2008 in these areas**



# Open access in FP7 (5)

## Open Access Pilot in FP7: implementation

- Applicable until when? During project and after project end
- Where should publications go? Institutional or subject-based repositories (Commission to provide temporary repository to store 'orphan' publications)
- Why "best effort"? Formulation strongly encourages researchers to comply while guaranteeing scientific and academic freedom
- What does "best effort" mean? Details to be provided in FP7 IPR Guidelines (check publisher policy, if necessary request change to copyright agreement, provide feedback to Commission)



# Open access in FP7 (6)

## European Research Council (ERC)

- *“Significant worries concerning the ability of the system to deliver wide access and therefore efficient dissemination of research results, with the resulting risk of stifling further scientific progress”* (ERC ScC communication in December 2006).
- December 2007 adopted guidelines on open access to ERC funded research results:
  - *Peer reviewed scientific articles:* deposited on publication to an appropriate repository and available open access no later than 6 months
  - *Research data:* consider it essential that underlying data are deposited to the relevant databases as soon as possible, preferably immediately after publication, no later than 6 months



# Open access in FP7 (7)

## ERC Guidelines: Implementation

- Guidelines apply during and after project duration
- “.....make best effort to ensure that the ERC guidelines on Open Access will be followed ” in line with the ERC grant agreement which states “...the beneficiary shall ensure that the foreground of which it has ownership is disseminated as swiftly as possibly”
- Modification of grant agreement to ensure open access becomes a legal requirement foreseen for the grant agreements in 2009
- Preference for “green” open access
- Exceptionally (e.g. exclusivity of journal, targeted scientific community): “gold” open access

## Monitoring and implementation

### INFRA-2009-1.2.3: Scientific Information Repository supporting the European FP7 Research Programme

- Call for proposals published on 9 Dec. 2008; deadline 17 March 2009, budget: € 4 million
- Seeks projects to support the establishment and operation of a technical infrastructure of digital repositories to deposit and access scientific articles and data produced under FP7 (incl. ERC)
- Infrastructure to build on existing work on repositories
- Expected impact: Enhancement of access to scientific information produced in the context of FP7; linking of many different repositories as a service and e-infrastructure
- Information day: December 16th 2008, Brussels

Further information: <http://cordis.europa.eu/fp7/ict/e-infrastructure/>

Relevant Work Programme: Research infrastructures 2009

[ftp://ftp.cordis.europa.eu/pub/fp7/docs/wp/capacities/infrastructures/n\\_wp\\_200901\\_en.pdf](ftp://ftp.cordis.europa.eu/pub/fp7/docs/wp/capacities/infrastructures/n_wp_200901_en.pdf)



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# Capacity-building (1)

## Studies on access to scientific information / open access

### Current:

- e-SciDR – Study of European repository infrastructure
- OAPEN - Open Access Publishing in European Networks
- PEER - Pilot Programme Investigating the effect of the deposit of author manuscripts on publishing

### Planned:

- Study on different types and future of open access publishing (“gold” open access)
- Projects focusing on networking, knowledge-sharing and training on access to and dissemination of scientific information

→ Input for FP8 policy



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# Conclusions and next steps (1)

## Steady progress over the past years

European policy makers have recognised the importance of access and dissemination for research and technology policies

- These issues are now firmly on the European policy agenda
- A lot of work ahead ...



# Conclusions and next steps (2)

## The challenges ahead

- **European policy: mobilisation of Member States; support coordinated initiatives**
- **Research funding body policy: monitoring of ongoing initiatives; towards an access and dissemination policy for the 8th Framework Programme (from 2014)**
- **Capacity-building activities: continuing support the development of sustainable e-infrastructure in all Member States**



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*Thank you for your attention!*

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**Further information:**

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[http://ec.europa.eu/research/science-society/open\\_access](http://ec.europa.eu/research/science-society/open_access)

Questions about the open access pilot: [rtd-open-access@ec.europa.eu](mailto:rtd-open-access@ec.europa.eu)

