



Digital broadband content Scientific publishing

**OECD Digital broadband content workshop
1 December, 2004**

Graham Vickery, OECD

Overview and scope

“Scientific publishing” covers:

- **Scientific and scholarly research publishing**
- **STM plus social sciences, humanities, arts**
- **Journals, monographs, reference books, research databases**
- **Academic and professional publishing**

Why is it important?

- **R&D, diffusion and use central to OECD economies**
- **Scientific publishing central to efficiency and costs of R&D and to access and use of knowledge**
- **Fastest growing media sector over last 15 years**
- **Scientific publishing leading in digitalisation and digital delivery -- 2003 75% of journals available online**
- **Balance shifting towards direct access to primary data sources**
- **New pricing and publishing models, IPR challenges, information repository management**

The scientific publishing industry

Publishers:

- **i) Commercial firms; ii) membership societies; iii) institutional publishers**
- **Funding pressures on ii) and iii) making them more commercial**
- **Commercial firms dominate STM market (top 4 about 50% market share) and important in other segments**

Changes taking place:

- **Digitalisation changing workflows and value chains**
- **Increased collaboration along value chains**
- **Changes in product and service possibilities and business models**
- **Scale economies, cross-media ownership and MNE / SME polarisation**
- **Disintermediation - publishers dealing directly with customers**
- **Intermediation - hosted distribution services, open access archives and repositories**

Value chains and business models

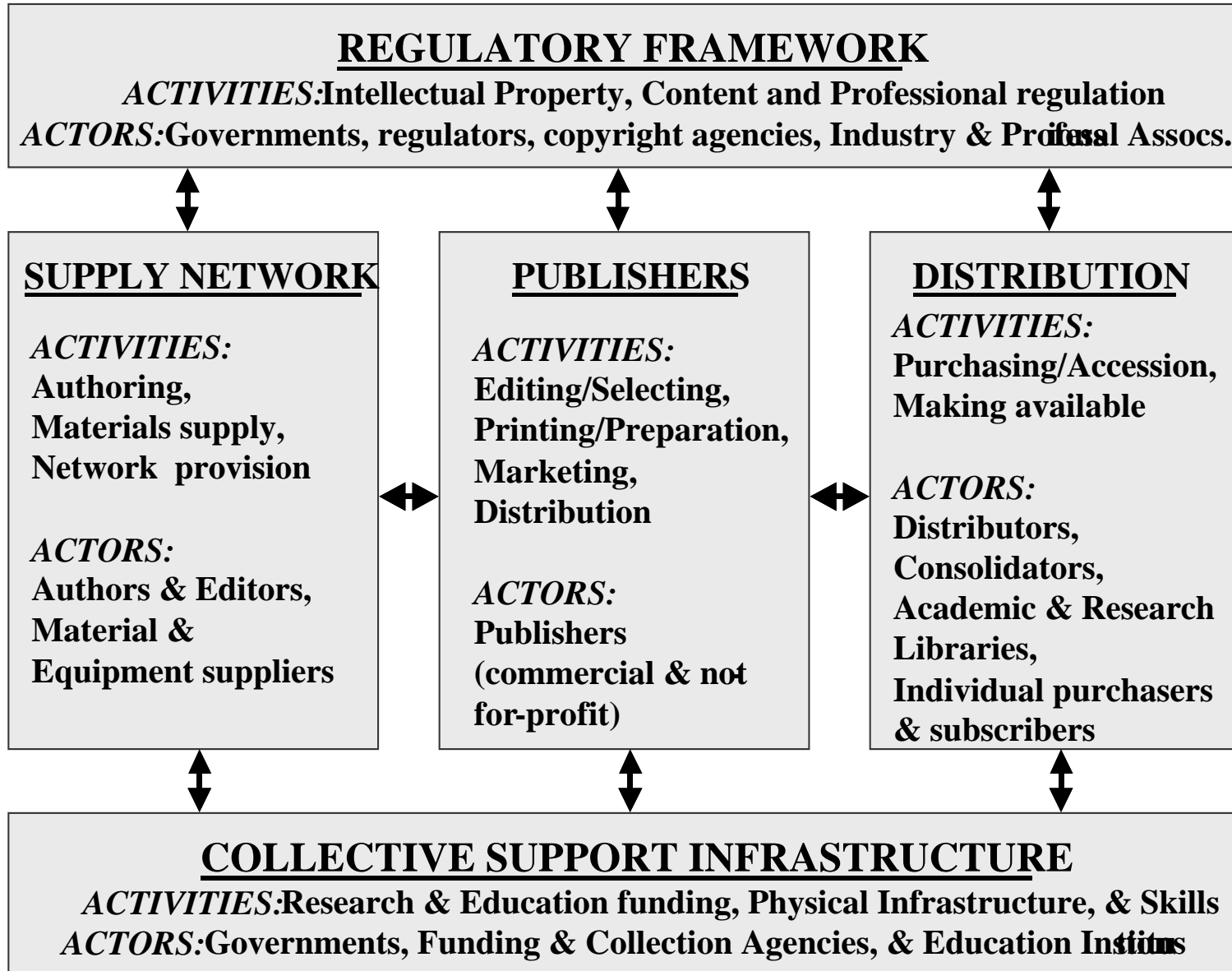
Three new business models developing:

- **Bundling subscriptions and site licensing -- subscribers pay to access a bundle of titles (the “Big Deal”)**
- **Open access publishing -- supply-side author or institutional support contribute some / all of publication costs**
- **Open access archives and repositories -- organisations support institutional repositories, subject archives for their communities**

Overall impacts:

- **Changing researcher needs / dealing with increasing masses of data**
- **Emerging opportunities of rapidly developing ICTs and applications in both research and science and in scientific publishing**
- **Unbundling of activities and greater cost transparency**
- **Increased specialisation along value chains**

Scientific Communication Product System



Emerging issues for government and other stakeholders

- **Innovation and technology -- Information and analysis of developments; re-assessing R&D and information institution support and their relations to access and archive issues**
- **Value chain and business models -- Standard contracts and licenses relating to copyright; cooperation with publishing industry on access and interoperable platforms; national and international co-operation to develop business models**
- **Infrastructure -- Development of archives and repositories; standardisation in copyright management; technology-neutral research evaluation between print and digital content outputs**
- **Business and regulatory environment -- Removing differences between treatment between print and digital content; common fora covering institutions, researchers and publishing bodies; competition issues**
- **Government content/public sector information -- Access, pricing and use of public sector information (research databases -- meteorological, oceanographic, space, remote sensing); leading role of government in maximising access to publicly funded research**