## OECD WORKING PARTY ON THE INFORMATION ECONOMY

#### - SUMMARY -

#### WORK PROGRAMME ON BROADBAND CONTENT

#### **June 2004**

- 1. The rapid development of high quality always-on broadband Internet services is transforming industries and activities that provide or have the potential to provide digital content. At the same time an expanding set of analytical and policy challenges are being raised. The OECD is undertaking analytical and policy-related work to address these challenges.
- 2. At its March 2003 meeting the OECD Committee on Information, Computer & Communications Policy (ICCP) adopted two tracks for this work: (a) a Committee statement on promoting broadband development; and (b) new work on digital content. In February 2004 the OECD Council adopted the Recommendation on Broadband Development.
- 3. In April 2004 the ICCP agreed that the Working Party on the Information Economy (WPIE) would undertake stocktaking studies of sectors where digital content is transforming value chains and business models. The first three sectors selected are (see Annex for more details):
  - Scientific and professional publishing which is undergoing the shift from traditional paper-based publication to new on-line information exchange and management of information data bases, combined with very high levels of peer-to-peer interaction in the global scientific and professional communities.
  - *Online computer games*, which is an entirely new economic and leisure activity, typified by high bandwidth requirements, new consumers, new business models, and new payment systems.
  - *Music*, which is a major established industry with a mix of creative artists and large distributors and established rights management systems which are being transformed by new delivery platforms (including peer-to-peer networks) and hardware (music devices).
- 4. The analysis of further sectors may follow.
- 5. An expert panel was held on 3<sup>rd</sup> June 2004, and a Workshop is planned for early December 2004.

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# **ANNEX**

Table 1. Characteristics of selected digital content sectors

PRODUCT CHARACTERISTICS	Scientific publishing	Online computer games	Music
Information intensity and potential for standardised, information-rich formats	Very high	Very high	Very high
Amenability to digital delivery	Very high	Very high	Very high
Digital version substitutes for and potentially extends physical product	Very high	Very high	Very high
Digitisation, digital storage and retrieval adds value	Very high	High	Very high
Degree to which digital delivery relies on broadband access	Average to High <sup>8</sup>	Very high	High
Potential for value-adding online interactivity	Very high	Very high	Average
Potential for value-adding customisation	High	High	High
Non-rival nature of the product <sup>1</sup>	Average to very high	Very high	Very high
Price discrimination and product bundling <sup>2</sup>	High	Average to High	Very high
INDUSTRY/PRODUCER CHARACTERISTICS	Scientific publishing	Online computer games	Music
High fixed costs of production and low marginal costs of replication and resulting supply-side economies of scale	High to very high <sup>3</sup>	Very high	Very high
Industry operating in global markets	Very high	Average to High <sup>4</sup>	Very high
Importance of Open Access (also on demand side)	Very high	Average	Very high
Importance of Open Source (also on demand side)	Low	Average <sup>5</sup>	Low
Importance of intellectual property	Very high	Very High	Very high
Leader in ICT use	High	Very high	High
USER/DEMAND SIDE CHARACTERISTICS	Scientific publishing	Online computer games	Music
Consumers use online digital formats	High	High	Very high
Demand for variety	High	High	High
Leaders in ICT use	Average to very high <sup>8</sup>	Very high	High to very high
Demand-side economies of scale, network externalities <sup>9</sup>	Very high	High to very high	? <sup>10</sup>
Users are content creators <sup>11</sup>	High	High	Low

Table 1. Characteristics of selected digital content sectors (cont'd)

IMPACT	Scientific publishing	Online computer games	Music
Transformative Impact on Firms and Sectors			
New business opportunities and business models	Very high	Very high	Very high
Value chain	Very high	High	Very high
Revenue and cost impact	Very high	Very high	Very high
Customer reach (incl. new markets)	Very high	Very high	Very high
Challenges and opportunities through open source and open access	Very high	High	Very high
Mutually reinforcing transformative impact on and of Technology	Scientific publishing	Online computer games	Music
Impact of new delivery platforms (new technologies, broadband, Wi-Fi) / Catalyst to broadband infrastructure and services	Average to high (broadband)	Very high (delivery platform, new hardware)	Very high (delivery platforms, new hardware)
Ripple effect on hardware industry (interactive TV, new consoles, portable devices)	Average	Very high	Very high
Transformative Impact on Consumers	Scientific publishing	Online computer games	Music
Lower search costs	Very high	Average	High
Lower price	High	High	High
Increase of product variety	Average	High	Average
Economic Impact	Scientific publishing	Online computer games	Music
GDP	Tbd	Tbd	Tbd
Employment	Tbd	Tbd	Tbd
Public good aspects	Very high	Low	Low

The product can be used (consumed) without diminishing the value to other users.

The marginal cost of adding an extra good to a bundle is low.

In scientific publishing for example the high initial investment is in intellectual input, digitisation of outputs and setting up of distribution channels.

<sup>4</sup> Language and cultural issues are important.

<sup>&</sup>lt;sup>5</sup> High for software in general.

<sup>&</sup>lt;sup>6</sup> See Annex 1 on open access and open source.

<sup>&</sup>lt;sup>7</sup> See Annex 1 on open access and open source.

<sup>&</sup>lt;sup>8</sup> Depends on whether reference is made to online journals or access to large scientific data files (genome research).
<sup>9</sup> The value of the network and demand for products increases with number of participants / buyers.

<sup>&</sup>lt;sup>10</sup> Depends on whether users post material.

<sup>&</sup>lt;sup>11</sup> Users add to the value of the product through participation, direct interaction, etc. For example, giving feedback on papers in scientific publishing, making online games more interesting through own performance.